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ABSTRACT

This report is a product of Project Focus which was initiated as a study effort by the American Association of Junior Colleges to determine the long-range goals of the nation's community and junior colleges. Data gathered from questionnaires administered to a cross-sectional sample of students, faculty, presidents, and institutions are presented and interpreted. The report includes a comparison of student and faculty backgrounds, feelings, and expectations, the presidents' views of where emphasis should be placed in delivering services to the community, and the presidents' evaluation of how well their institutions are meeting the promise of equal educational opportunities for all. The report is comprised of five chapters: (1) methodology employed in the study, (2) student and faculty socio-economic and demographic characteristics, work experience, career aspirations, and perceptions of campus policies, (3) comparisons of students', faculty and presidents' views of traditional long-range goals, (4) evaluation of four major college activity areas and suggestions for improvement, and (5) future impact of selected socio-economic trends currently influencing behavior in the community college. Technical appendices to the report are titled: (A) Methodology, (B) Innovative Institutions Index, (C) Presidents' and Faculty Perceptions of Goals for the 70s, and (D) Exhibits, including student, faculty, president and institutional survey forms and a follow up questionnaire. (AL)

REPORT FROM PROJECT FOCUS: STRATEGIES FOR CHANGE

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American Association of Junior Colleges

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FOREWORD

Project Focus was launched in the late summer of 1970 with the aid of a W. K. Kellogg Foundation grant. As a study of the long-range goals of the nation's community and junior colleges, it was undertaken at a time when the comprehensive community college was enjoying a period of unprecedented growth and support from major segments of our society. The purpose of the study was to determine where community colleges are headed, how likely they are to reach their objectives, and what alternative strategies ought to be considered. It was our hope that the various recommendations emanating from the study would serve as policy guides for the American Association of Junior Colleges (AAJC) and its institutional members.

Three reports have been or will be published. The first, A Report from Project Focus, contains a series of recommendations for change in the scope and function of AAJC. These recommendations were approved in principle at the August 1971 meeting of the AAJC Board of Directors and a number of steps are now being taken to implement them. The second will be a book scheduled to be published commercially later this year. The book will report my first-hand impressions of significant events in the field gathered during an extensive ten-month tour during which time I interviewed over 1,500 persons located in thirty institutions in twenty different states. The third report, published here, has as its primary mission the interpretation of the data gathered through the administration of four questionnaires to a cross-sectional sample of students, faculty, presidents, and institutions.

The report offers those concerned and involved with community junior colleges an opportunity to scrutinize what's happening on the community junior college campuses. The backgrounds, feelings, and expectations of students are analyzed and compared with those of the faculty. Presidents are asked to assess where they feel the main emphasis should be placed during this decade in the delivery of services to the community. All three groups report on how well their institutions are delivering on the promise of equal educational opportunities for all.

Chapter 1 sets the stage, reviews the procedures employed in the study, and briefly discusses the format for presentation of the findings. Chapter 2 gets down to particulars. It takes an indepth look at a representative sample of freshmen and sophomore full-time students as well as the faculty who work with them. Students' family backgrounds, high school experiences, career expectations, and attitudes concerning their present learning experiences are reported in summary form with interpretations of the significance of the findings offered where relevent. The backgrounds of the faculty, their work experience, attitudes toward their work and career aspirations are also provided. A brief section comparing student and faculty perceptions of campus policies and practices is also offered as a sobering commentary on how two groups observing the same phenomenon from different perspectives react in different ways. There will be some surprises and some predictable results. Those responsible for overseeing the administration of student services will be challenged by the students' reactions.

Chapter 3 contrasts and compares the student, faculty, and presidents' views of the long-range goals traditionally endorsed by the community

junior college leadership. These goals are presented in two ways: first, those participating in the survey were asked to rate what they felt the long-range goals of community junior colleges ought to be during the decade, and second, they were asked to rate how much emphasis these same goals were receiving currently. Some rather interesting differences emerged from the data. Chapter 4 attempts to evaluate four major areas of activity common to community junior colleges and offers for the reader's consideration alternative ways of improving upon these activities. The last chapter, Chapter 5, attempts to look ahead at the impact of a few of the social and economic trends currently influencing our behavior. The implications in terms of community junior college response are spelled out in some detail. All five chapters describe a drama which began over 70 years ago and is now placing the community college at center stage.

Edmund J. Gleazer, Jr.
Project Director

February 1972

ACKNOWLEDGMENTS

In August, 1970, Project Focus was established under the auspices of the American Association of Junior Colleges with financial support from the W. K. Kellogg Foundation. Edmund J. Gleazer, Jr., executive director of the Association, took a year's leave of absence in order to serve as director of the project. David S. Bushnell and Ivars Zagaris undertook to marshall statistical data related to the information obtained by Dr. Gleazer during his extensive field visits. It is this data, gathered by means of questionnaires and other data sources, which is reported and interpreted here.

The members of the Project Focus team wish to acknowledge the valuable support offered by various agencies during the span of the study. We are particularly indebted to the American College Testing Program, Inc., and to Dr. Phil Rever whose survey experience and data processing skills were invaluable. ACT's willingness to permit us to use the Institutional Self-Study form and manuals assured us that the data collected would be not only reliable but valid.

The Educational Testing Service - in particular, Richard Peterson and Elden Park - was a substantial contributor to the success of this under - taking. With ETS's permission, the Institutional Goals Inventories was modified for use in our survey.

The National Center for Educational Statistics of the U. S. Office of Education, under the direction of Dorothy Gilford, was instrumental in providing a grant that made it possible for us to obtain information on

students currently enrolled. We are grateful to Richard Berry and Eugene Tucker for facilitating and monitoring the contract.

A number of other groups advised and counseled the research staff during the formative stages of the study. The Berkeley Center for Higher Education Research and the Bureau of Social Science Research in Washington, D. C., merit particular mention. A number of their staff members served as valuable sounding boards. Others were asked to review and comment on portions of the manuscript. In particular, we wish to thank Max Raines and Gunder Myran of Michigan State University, James Wattenbarger of the University of Florida, Edward Gross of the University of Washington, Richard Peterson of ETS, and Ray Schultz of AAJC for their willingness to read and comment upon various chapters of the report.

We are also indebted to John Creager of the American Council on Education, who provided valuable assistance in the design of the sampling procedures and in suggesting appropriate weighting procedures. Several staff members of AAJC provided counsel and encouragement throughout the study: Aikin Connor and William Inglis gave us the benefit of their experience and knowledge about computer programming analysis. Barbara Koziarz served as editorial advisor and made many helpful improvements in the wording of the report. Throughout the project, Edith Liebske, Dollie Baggett, Brenda Warren, and Margaret Takanaka provided the staff support and dedication necessary to bring the report to its conclusion.

We also wish to acknowledge the many contributions of Francis Pray, Donald Beckley, and other members of the Frantzrab and Pray Associates, Inc. Their cooperativeness during some of the more hectic periods surrounding the field visits is very much appreciated.

Finally, Edmund J. Gleazer, Jr., as director of the project, kept before us the objectives of the study and stressed the importance of firsthand observations in making sense out of the data. His ability to interpret and to find the significant connections between what we were observing and their causes was invigorating.

These are the people who helped to insure that the insights gained through Project Focus are valid and have a bearing upon the future role of community junior colleges. It goes almost without saying that the errors of commission and omission overwhich the reader may stumble as he reads through this manuscript are those of the authors and not their associates .

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CHAPTER 1

INTRODUCTION

Seventy-two years ago, eight junior colleges existed in this country with a total enrollment of approximately 100 students. By 1971, 1,100 private and public junior colleges were flourishing with almost 2,500,000 enrollees [1].[1] The prospects for a continuous rate of growth through 1980 are strong. Where this national movement is headed and what and how students will be served are already being determined by the play of forces now in motion. By tapping the views of trustees, community leaders, faculty members, key administrators and students, by assessing current population and economic trends, and by drawing upon other research efforts, we hope to identify and interpret the forces influencing the future direction of community and junior colleges and draw what empirically valid conclusions are warranted. The W. K. Kellogg Foundation, a major supporter of community and junior colleges, funded the study in the hope that it would aid those responsible for directing the nation's effort to achieve the unique goals of these institutions. The extent to which community and junior colleges are actually enrolling a broad cross-section of students through the open door policy, occupational education programs, career guidance services, college transfer programs, and community outreach efforts, requires a careful assessment at this time if desired changes or minor corrections in our trajectory are to be achieved by the end of the decade.

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1. All references will be listed at the back of the report. Specific page references will be designated at the place of citation.

This study had four major objectives. First, key constituent groups were asked to give their views on the long-range goals to be served. Second, discrepancies between the desired goals and present accomplishments were pinpointed. Third, social and economic trends likely to influence the future direction and future of community and junior colleges during this decade were identified. Fourth, a set of strategies for systematically achieving greater harmony between goals and current practice were to be set forth. To obtain the information necessary to achieve these objectives, a literature search was conducted and communication links with already existing data banks on community and junior colleges were established. Through the use of structured interviews, survey questionnaires, and site visitations, relevant data were obtained from a nationwide sample of community and junior colleges. An advisory group was convened in the early stages of the project to solicit reactions to the areas of information to be probed by means of the questionnaires and interviews, and to suggest various hypotheses for testing once the data was in. This group met in early February, 1971. Their deliberation had a profound impact upon the subsequent analysis.

A small team of three professionals and two support personnel took upon themselves the responsibility for gathering and interpreting the necessary data. An outside consulting firm, Frantzreb and Pray Associates, Inc., was asked to conduct a special analysis within the larger framework, that of recommending changes in the organizational structure and services of the Association. Dr. Edmund J. Gleazer, Jr., Executive Director of AAJC, took a year's leave of absence from the Association and assumed primary responsibility for the conduct of the field study. As Director of the project, he was also responsible for the overall interpretation and recom-

mendations of the Project Focus Task Force. David S. Bushnell was given responsibility for the research activities involved in the preparation of this report. Ivars Zageris served as staff associate.

Sample Selection

The first step in the study was to identify the universe of community and junior colleges to be sampled. Two-year postsecondary institutions have been variously labeled "community colleges," "junior colleges," "branch colleges," etc. Most are supported by a local school district, either in conjunction with a district's elementary and secondary schools or separately as a junior college district. Others derive their support from the state or operate as privately funded institutions with most of their income derived through tuition.[1] The 1970 Junior College Directory, published by the American Association of Junior Colleges, was adopted as our operational definition of the universe to be studied. The number of community and junior colleges listed in the Directory is somewhat larger than that reported by the U. S. Office of Education. This is due primarily to the fact that AAJC includes in its membership two-year branch campuses who elected to become members of the Association. Not all institutions listed in the Directory, however, are members of AAJC. Those branch campuses which are integral parts of their respective parent institutions and do not function as community junior colleges were excluded from the population of institutions to be sampled. Fifty-six campuses from the states of Ohio, Pennsylvania, South Carolina, and Wisconsin were eliminated for this reason. In addition, for logistical reasons, only colleges in the Continental United States were considered, thus excluding colleges in Alaska, Hawaii, Puerto Rico, etc. Having established these two quali-

1. Throughout the report, community colleges will refer to the public junior colleges. Junior colleges, on the other hand, have come to be identified with privately supported institutions, be they sectarian or non-sectarian. This distinction will be maintained throughout the report. Community junior colleges is meant to encompass both types of institutions.

fications, 956 community junior colleges remained to be sampled. Of these, 721 are public institutions; 107 are independent junior colleges; and 128 are private church related junior colleges.

Survey instruments were mailed to the institutions selected for participation. Students, faculty, and presidents each completed separate instruments. An institutional questionnaire was also administered providing basic data on the sample of institutions involved. Copies of the four questionnaires can be found in Appendix D. The data presented in this report is derived primarily from the findings in the questionnaires. Occasionally, when a particular interpretation of the data is open to question, we drew upon the extensive interview material gathered by Dr. Gleazer and other members of the staff during their visits to a subsample of institutions drawn from the larger sample.

Methodology

A two-stage sampling design was used. The first stage employed a stratified sample of colleges drawn from the 1970 Directory. The second stage involved a random selection of respondents (students and faculty) within the selected institution. Various weights were assigned to make the estimates of population parameters from the data obtained in the survey (Appendix A describes the weighting procedures employed).

The institutions listed in the 1970 Directory were stratified according to geographic area, size, and type: public, church related, or independent. Because of the small number of institutions falling into the church related and independent junior college classification, they were not broken down any further. The public community colleges were classified into six geographic

regions, the regions corresponding to those developed by Vernon Hendrix in his 1965 study [30] of the impact of the junior college environment on students. The regions were selected so that no single state would dominate a given region with the exception of California which was made into a separate region. The regions encompassed economically and essentially culturally homogeneous areas. Within each region, colleges were classified according to size. The complete stratification resulted in 32 cells to be used for sampling purposes (see Table 3a, Appendix A).

A 10 per cent random sample was drawn from each cell. No cell was left at zero; each cell having at least one entry. Thus, due to rounding, the overall percentage was slightly higher than 10 per cent. The initial sample consisted of 100 institutions.

Contact was made by letter with the presidents of the sample institutions during the latter part of January, 1971. Twenty-one presidents turned down the initial invitation to participate. As soon as a rejection was received, the institution was replaced with another randomly chosen from the same cell. At the time of the cutoff date (March 26, 1971) 92 institutions had agreed to participate in the study. They constituted the final sample. The overall match of actual against desired cell frequencies is reported in Table 3a, Appendix A. Table 5a, Appendix A, demonstrates that the 21 refusals were randomly distributed with no one geographically area dominating. In addition, three institutions failed to advise us before the cutoff date of their inability to participate, thus bringing the total number of initially sampled non-participants to 24. One follow-up letter and individual telephone calls helped to insure that the overall rate of participation was more than adequate.

Student Sample

The presidents, following their agreement to participate in the study, were asked to appoint a member of their immediate staff to coordinate the administration of questionnaires to students and faculty. The campus coordinators were given instructions on sample selection procedures and the appropriate steps to follow in the administration of the questionnaires. The importance of insuring the confidentiality of the results was emphasized. Each coordinator was asked to select a random sample of students on the following basis: If the institution had less than 1,000 full time students, 100 students should be sampled for inclusion in the survey. If the institution had 10,000 or more students, a five per cent random sample was to be selected. Only full-time students were to be included. One of three alternative sampling procedures outlined in the American College Testing Program Manual [3] was to be employed. Each campus coordinator was instructed to insure that the ratio of freshmen to sophomores at each institution would be properly reflected in the sample chosen. From an initial sample of 12,022, 10,250 student responses were accepted as usable, giving us a response rate of 85.6 per cent. By assigning the prover weights, the sample was generalized to a total weighted population of 1,133,916 students. It is this figure which serves as our base line for the subsequent analysis.

Faculty Sample

The faculty were sampled in much the same way that the student sample was drawn. Each coordinator was instructed to select a 10 per cent random sample of faculty members if the institution had more than 500 full time faculty. Those institutions which were smaller than 500 were instructed to survey 50 randomly drawn faculty members or, if less than 50 were reported

to be employed, then all were asked to complete the questionnaire.

The number of faculty members was based upon the number of full-time, certified faculty members plus those administrators who primarily teach but also serve as deans and department chairmen. For the most part, questionnaires were distributed to the faculty by campus mail and returned to the campus coordinator in sealed envelopes.

The total number of faculty sampled initially was 2,741; the usable faculty responses were 2,491, yielding a response rate of 90.9 per cent. The weighted population of faculty came to 69,350. Since both the student and the faculty response rates were so high, no special study of non-respondents was conducted.

In addition to being assigned the responsibility for designing and selecting an appropriate sample of students and faculty, the campus coordinator was asked to complete the institutional questionnaire. Unfortunately, because of the difficulty encountered in completing this questionnaire, a relatively small number of coordinators were able to complete this assignment in the time allotted. The poor response rate on the institutional survey instrument led us to abandon the use of this questionnaire.

Ninety presidents completed their questionnaire giving us 98 per cent response rate.

The survey team is indebted to the American College Testing Program (ACT) not only for permission to use their Institutional Self-Study Survey form but also for their willingness to commit staff and computer time to the project. They arranged to have the data edited and stored by means of

optical scanning equipment and actually programmed and ran a good part of the analysis, with the collaboration of the Project Focus staff.

We are also indebted to the Educational Testing Service (ETS) for the use of their Institutional Goals Inventory. It proved to be the right instrument at the right time. A modified form was employed to comply with the space limitations imposed by the ACT optical scan answer sheets.

In addition to the time, staff resources, and instruments made available by both testing services, the National Center for Educational Statistics (NCES) of the U. S. Office of Education contracted with us to analyze the student data and to provide them with a series of tables summarizing the results of our analysis. NCES will publish later this year a brief description and summary of the data on community and junior students made available through the auspices of Project Focus.

CHAPTER 2

THE WARP AND WOOF OF JUNIOR COLLEGES: STUDENTS AND FACULTY

The unprecedented growth of public community junior colleges during the last decade, represented by a 300 per cent increase in enrollments and a doubling of the number of institutions, attest to the popularity of these remarkable institutions. Twenty years ago community colleges were being challenged to defend themselves as worthy of the name of higher education. Even as recently as 1964, Robert Hutchins described the community college movement as "confused, confusing, and contradictory. It has something for everybody. It is generous, ignoble, bold, timid, naive, and optimistic ... its heart is in the right place; its head does not work very well" [31]. Others see it as "one of the few unique accomplishments of American Education in the 20th Century" [17]. As a mainstay of mass higher education, community junior colleges have emerged as a true melting pot for the community. Their unique function has been chronicled by many and critically evaluated by few. The verdict is not yet in on how well they have taken on the tougher tasks of higher education. However, the data will demonstrate that progress is being made.

Founded initially as a place where eligible students could enroll in two years of lower division undergraduate study, the community based public junior college has expanded its purposes to encompass a variety of community, cultural, and educational needs. Its traditional tripartite functioning -- transfer, terminal, and community service -- were first laid down by Lange [35] and others as early as 1927. These classical functions are still as relevant today as they were 50 years ago. Bogue's book, The Community College [7], published in 1950, introduced the concept of the

public community college as a third force in education, representing a fresh approach and a needed antidote to the traditional curriculums of high school and college.

Even before Bogue, the Truman Commission on Higher Education [45] noted the need for expanded educational opportunities beyond high school. Forty-nine per cent of those conscripted for military service during the war years qualified, according to their scores on the Army General Classification Tests, for fourteen years of education. Thirty-two per cent of those tested were found to be qualified for four years of college and 16 per cent for graduate study. The Commission concluded that "the time has come to make education through the fourteenth grade available in the same way that high school is now available."

Opening the doors to higher education for all candidates, regardless of race, religion, or wealth was at that time a revolutionary idea. Since then the goal of many states (recently reinforced by the Carnegie Commission on Higher Education [12]) has been to put a college within commuting distance of every potential enrollee. Willingham [54], in his detailed state-by-state examination of the need for additional educational institutions, demonstrates that if the growth rate of new community colleges continues at its present pace in the right places, universal higher education through the fourteenth year for 90 per cent of the population in this country will become a reality by 1980.

More recently, the Civil Rights Movement has mounted a major effort to open up postsecondary educational opportunities to minorities and to disadvantaged students generally. Massive investments by state governments, backed up to a lesser extent by federal appropriations, have helped local institutions to reach out and involve these "new" students. The

establishment of state master plans for higher education (patterned after California's Master Plan) introduced a number of new alternatives for the marginal students that have helped to change the traditional concept of higher education. Technical institutes, area vocational schools, and the comprehensive community colleges represent such a range of options at the postsecondary level.

While many disadvantaged and minority students are being provided financial aid through federally guaranteed loans and Educational Opportunity Grants, some are still experiencing difficulty finding adequate financial support. A number of studies [5] have shown that the higher a student's socioeconomic background, the more likely he is to attend college and to graduate. Even direct student aid programs have been shown to favor those who come from higher income families [27]. Whether or not such inequalities are attributable to economic or social factors has yet to be conclusively demonstrated; however, the inequities persist.

Most advocates of the open door college support the concept of free tuition at least through the first two years of college. The Educational Policies Commission of the N.E.A. recommended in 1964 that a tuition free education for the first two years beyond high school be provided to all students seeking access [22]. The Carnegie Commission more recently recommended a similar goal, namely, that no tuition be charged for the first two years of a college education at a public institution [15]. The continuing pressure to expand access to higher educational opportunities is the product of many forces. Low cost/low risk institutions appeal to students who could not otherwise afford college or to those who are undecided on their future careers. The accessibility of most community colleges to college age as well as adult enrollees creates a unique institutional

appeal. Local employers seeking trained workers view it as an economic asset. Civic leaders look to it for cultural enrichment.

However, not all observers of the educational scene give the community colleges their unalloyed endorsement. Christopher Jencks and David Riesman in The Academic Revolution [32] attribute the popularity of the public community college to proximity, low cost, and a backlash against nationally oriented colleges and universities. Much of this backlash, they contend, reflects the anxiety of lower middle class parents with the increasing emancipation of the younger generation on the residential campus. Because the universities have become increasingly selective, these same parents want to ensure that their own offspring have access to higher education without the sacrifices and demands imposed by the four-year institutions. It is the Jencks and Riesman thesis that community colleges appeal primarily to the marginal student of modest ability and uncertain plans. How well their observations are borne out by today's mix of community college students will be examined shortly.

Frank Newman [41, pg. 71] sums up the dilemma confronting the nation's community junior colleges by observing that "the public and especially the four-year colleges are shifting more and more of the responsibility onto the two-year colleges for undertaking the toughest tasks of higher education. Simultaneously, the problems we have already identified -- the poor match between the students' style of learning and the institutions' style of teaching, the lock step pressure to attend college directly after high school, the overemphasis on credentials -- are overtaking the community colleges and rendering them increasingly ill equipped to perform the immense task they have been given."

Whatever their shortcomings, enrollment expansion continues unabated. At the time of the Truman Commission, about 25 per cent of college age students were actually enrolled in college. By 1980, the number is expected to have swelled to 66 per cent. The Carnegie Commission announced recently that freshmen enrollments in public and private four-year institutions declined in 1971 when compared with 1970 levels. Two-year colleges, on the other hand, experienced an 8 per cent increase in total enrollment. Students from racial minority groups were reported to have made substantial enrollment gains over 1970. Black and Spanish surname student increases in the junior colleges were roughly twice the total enrollment increases at public four-year colleges. In the words of Pat Cross [20, p. 17], "we are no longer concerned with whether students are ready for higher education, but whether higher education is ready for them."

In this chapter, three important topics will be examined. First, the backgrounds, the expectations, and reactions of students who participated in our cross-sectional sample of public and private junior colleges will be reported. Second, faculty reactions and perceptions together with their background and career expectations will also be explored. Third, the contrasting perceptions of students and faculty on various student services and programs will be presented. You will note that the data is presented in the form of national norms so that the reader can more readily generalize from the results to the total population of full-time students and faculty currently involved in our nation's most notable educational experiment.

Enrollment Statistics

Of the two and one-half million students enrolled, about 50 per cent

are full time. Many find it necessary to work while attending college. Fifty-four per cent of the male students and 40 per cent of the female students work 15 hours a week or more. Approximately two-thirds of the full-time students are freshmen, 84 per cent having graduated from high school in 1970. Only 10 per cent of the students live on campus and over half live at home. Approximately 80 per cent applied for admission while living within a 50 mile radius of the college. Roughly half of all the students are from towns or cities of less than 50,000 population. Sixty per cent of the students graduated with a high school class of less than 400. Eighty-six per cent came to college from a public high school.

The Carnegie Commission report on the Open Door Colleges [15, p. 30] revealed that the median enrollment in public community colleges was 1,380 while that for private junior colleges was only 471. Thirteen per cent of the public community colleges had enrollments of 5,000 and over, while 12.6 per cent of the private institutions were above the 1,000 enrollment mark. About one out of ten of our sample of full-time students were enrolled in a private junior college.

Statistics such as these illustrate the degree of variability of enrollments at the two-year college level. Public and private junior colleges do not serve the same constituencies as the four-year colleges and universities. The backgrounds and characteristics of the community junior college student that shape his interest, career goals, and values represent a diverse array with heavy emphasis on the disadvantaged, the minority, and the home-based student. While these characteristics cannot be changed during a student's college career, they do serve as appropriate background information upon which faculty and administrators can build their strategies for helping students learn. If we think of these background experiences

as "inputs" to the planning process, the knowledge of trends in this area will be of help to those concerned with predicting future needs. Age, sex, ethnic status, previous high school experiences, and family socioeconomic status are the attributes which will be touched upon here.

Student Characteristics--Ethnic Status

A dramatic increase in the number of minority group students enrolled full time in public community and private junior colleges is evident when the data from the Project Focus survey is compared with an earlier study (see Table 2.1). Thirty-one per cent of those responding to the background question on racial or ethnic status in our survey identified themselves as minority group members, as contrasted with only 9 per cent in 1969. Twenty-three per cent are Black, 5 per cent are of Mexican or Spanish-speaking heritage, 2 per cent are American Indian, 1 per cent are Oriental Americans and the remaining 69 per cent identify themselves as Caucasians.[1]

Table 2.2 indicates that there are fewer minority group members than non-minority students enrolled as sophomores. For example, only 19 per cent of the male sophomores were Black in contrast with 71 per cent of the White male students. The comparatively recent upsurge of Black student enrollments in the public community colleges could, of course, account for part of this difference.

Minority students reported lower family incomes than did White students (see Table 2.3). Thirty-seven per cent of the Spanish-speaking male

1. Fifteen per cent of the student population sampled did not respond to this question, thus opening up the issue of whether or not the distribution as reported is reliable. Any subsequent discussion of the findings pertaining to ethnic groups should be viewed with this limitation in mind.

TABLE 2.1--ETHNIC GROUP MEMBERSHIP BY YEAR OF ENROLLMENT AND SEX
(in percentages)

Ethnic Status	1969*		1971**	
	M	F	M	F
Minority	7.5%	10.9%	33.5%	26.8%
Non-minority	92.5	89.1	66.5	73.2
Total	100.0	100.0	100.0	100.0

* Based on Bureau of Social Science Research data

** Based on Project Focus data

TABLE 2.2--ENROLLMENT OF STUDENTS BY YEAR IN SCHOOL BY RACE AND SEX
(in percentages)

Race	Freshman		Sophomore		Total	
	M	F	M	F	M	F
Afro-American	29.0%	22.7%	18.9%	15.4%	25.0%	19.8%
American Indian	1.5	1.9	2.0	1.6	1.7	1.8
Caucasian	62.8	70.0	71.4	78.7	66.5	73.2
Mexican/Span. American	5.0	3.8	5.8	4.2	5.3	3.9
Oriental Am.	1.5	1.5	1.6	1.0	1.5	1.3
Total	99.8	99.9	99.8	99.9	100.0	100.0
(Weighted N in Thousands)	(323.0)	(272.7)	(217.8)	(148.9)	(540.8)	(421.6)

students, 42 per cent of the Afro-Americans and approximately 30 per cent of the American Indians and Oriental-Americans reported less than $7,500 a year family income compared to only 18 per cent of the Caucasians. Not all minority group students, however, came from low income families. Only the Spanish-speaking Americans reported fewer than 20 per cent having an income of $15,000 a year and over. Incidentally, the overall distribution of present family incomes represented by the community junior college student responses closely parallels that of the national distribution as reported by the U.S. Census. The median income reported in 1970 for all U.S. families was $9,867 [52], almost the identical median income reported by students participating in the Project Focus survey.

There were few differences among ethnic groups with regard to their primary sources of financial support (see Table 2.4). More of the male Caucasian and Black students depended upon their own employment or personal savings than did male Spanish-speaking Americans, American Indians, and Oriental-Americans. More than 50 per cent of the female students of American Indian extraction depended on their own employment or savings. One out of every four Oriental and American Indian males depended upon repayable loans and Educational Opportunity Grants as their principal source of financial support. Almost 20 per cent of all male students cited the GI Bill or veterans benefits as their principal source of income. Most female students depend upon their parents or spouses for support, with the exception of the female American Indian cited above.

The educational attainment level of the parents for all ethnic groups was essentially the same with the possible exception of Spanish surname students, the majority of whom reported that their parents had less than a high school diploma. More than half the fathers from each of the ethnic

TABLE 2.3--FAMILY INCOME BY RACE AND SEX
(in percentages)

Level of Family Income	Afro-American		Mexican/ Spanish-Am.		Caucasian		American Indian		Oriental American	
	M	F	M	F	M	F	M	F	M	F
$3000-7499	42%	37%	37%	42%	18%	17%	33%	15%	26%	24%
$7500-14,900	31	37	36	36	43	33	41	66	40	37
$15,000 and over	21	20	15	6	21	19	21	13	21	21
Don't know	6	6	13	16	19	32	5	7	13	19
Total	100	100	101	100	101	101	100	101	100	101
(Weighted N in Thousands)	(138.8)	(82.3)	(27.6)	(16.1)	(352.6)	(302.3)	(14.0)	(22.0)	(8.2)	(5.3)

TABLE 2.4--PRIMARY SOURCE OF FINANCIAL SUPPORT BY RACE AND SEX
(in percentages)

Source of Support	Afro-American		Mexican/ Spanish Am.		Caucasian		American Indian		Oriental American	
	M	F	M	F	M	F	M	F	M	F
Parents or Spouse	33%	44%	34%	43%	36%	56%	42%	22%	49%	57%
Employment or Savings	29	22	19	24	29	19	15	54	15	15
Loan or EOG	10	17	10	17	4	10	27	13	23	7
GI Bill	19	6	26	6	19	4	10	4	10	3
Scholarship or Grant	6	8	7	7	7	7	3	4	1	8
Other	3	3	4	3	4	3	2	3	2	9
Total	100	100	100	100	99	99	99	100	100	99
(Weighted N in Thousands)	(135.8)	(85.3)	(28.9)	(16.5)	(358.4)	(311.1)	(17.4)	(22.7)	(8.3)	(5.6)

groups were found to have at least a high school education and 30 per cent or more had some college. The educational attainment level of mothers closely paralleled that of the fathers with the possible exception of mothers of Black students whose overall educational attainment level was higher than the fathers (24 per cent of the fathers and 16 per cent of the mothers were reported to have had an eighth grade education or less).

Most students, regardless of ethnic status, aspire to at least a bachelor's degree (see Table 2.5). Male students consistently aspire to a higher level of educational achievement than do females. Thirty-two per cent of all female students expect to achieve either an associate of arts degree or a vocational certificate; however, only 16 per cent of the male students plan to do so. Fifty-three per cent of the Spanish-speaking male students and 59 per cent of the American Indian male students aspire to a master's degree or higher. White, Black, and Oriental-American students show about the same level of aspiration, with two out of five indicating their desire for an M.A. degree or higher.

More males than females are enrolled in the college transfer program (see Table 2.6).[2] Only the American Indian female student deviates significantly from the norm. This apparent disinterest in a career education among the various ethnic groups is consistent with earlier studies [24, p.71], although the findings may be more apparent than real. Cross comments that [20, p.1]: "Although it simplifies things to speak of both students

2. The occupationally oriented and college-transfer oriented students were identified by sorting all students responding to #4, "What is the highest level of education you expect to complete?" into three groups. Those who indicated that they expected to stop with a junior college degree or less (response codes 0 and 1) were classified as "career program" students; those who said they hoped to achieve a bachelor's degree or above (response codes 2-8) were grouped as "college-transfer" students; and those who responded "other" were labeled "unknown".

TABLE 2.5--EXPECTED LEVEL OF EDUCATIONAL ACHIEVEMENT BY RACE AND SEX
(in percentages)

Highest Expected Level of Educ. Achievement	Afro-American		Mexican/ Spanish Am.		Caucasian		American-Indian		Oriental-American	
	M	F	M	F	M	F	M	F	M	F
Less than 2 years	4%	8%	3%	9%	3%	5%	2%	9%	1%	7%
AA degree	11	26	7	19	14	25	9	29	21	17
BA degree	38	32	34	36	37	36	28	24	27	42
MA or MBA	27	22	33	24	26	24	26	23	28	25
PhD, EdD	6	5	9	5	7	4	20	6	4	2
MD or LLB	8	2	11	2	9	1	13	2	14	3
Other	6	4	2	4	4	4	2	7	5	3
Total	100	99	99	99	100	99	100	100	100	99
(Weighted N in thousands)	(134.6)	(81.6)	(28.5)	(16.4)	(357.9)	(305.9)	(9.2)	(7.4)	(8.3)	(5.6)

TABLE 2.6--TYPE OF PROGRAM BY RACE AND SEX
(in percentages)

Type of Program	Afro-American		Mexican/ Spanish Am.		Caucasian		American-Indian		Oriental-American		TOTAL	
	M	F	M	F	M	F	M	F	M	F	M	F
Career Program	17%	39%	11%	30%	18%	33%	8%	60%	23%	25%	17%	35%
College Transfer	83	61	89	70	82	67	92	40	77	75	83	65
Total	100	100	100	100	100	100	100	100	100	100	100	100
(Weighted N in thousands)	(128.9)	(83.7)	(28.2)	(15.9)	(350.1)	(302.1)	(12.5)	(22.7)	(7.9)	(5.5)	(553.2)	(447.9)

enrolled in the technical degree programs and those in the vocational non-degree curricula of the community college as occupationally oriented, it should be noted that many of them say that they hope to transfer to a four-year college." Those students whom one would predict are the most likely to benefit from an occupationally oriented curricula report their reluctance to do so in the not-unfounded fear that if they do not initially enroll in the college transfer program, they will be prevented from doing so at a later time by the lack of appropriate credits. This issue is analyzed in more detail in Chapter 4.

There are few differences between the minority group students and White students on their future vocational plans. As one would expect, more female students than male students aspire to a teacher or therapist role (29 per cent of all female students checked this response against only 13 per cent of the male students). Thirteen per cent of the male Oriental-Americans and 11 per cent of the male Spanish-speaking Americans indicate that they hope to become researchers or investigators--in contrast with only 2 per cent of their female counterparts.

The overall level of satisfaction of ethnic groups with their college experience varies (See Table 2.7). Students of Oriental or American Indian extraction, particularly the male students, indicate a less than satisfactory experience. Fifty-five per cent of the American Indian male students and 47 per cent of the male Oriental students responding to the question on overall satisfaction indicate that they are indifferent or dissatisfied with that experience. Since both of these minority groups have only recently begun to agitate for greater recognition, their persisting frustrations may be reflected in these findings. This same group of male American Indian students found high school inadequate (see Table 2.8)

TABLE 2.7--LEVEL OF SATISFACTION WITH COLLEGE BY RACE AND SEX
(in percentages)

Level of Satisfaction	Afro-American		Mexican/ Spanish-Am.		Caucasian		American Indian		Oriental American	
	M	F	M	F	M	F	M	F	M	F
Completly Satis.& Satis.	66%	71%	72%	75%	72%	76%	45%	70%	53%	64%
Indifferent	21	19	15	17	18	13	32	19	35	20
Unsatis. & Completely Unsatis.	13	10	13	8	11	11	23	11	12	17
Total	100	100	100	100	101	100	100	100	100	101
(Weighted N in Thousands)	(136.1)	(85.5)	(28.4)	(16.5)	(359.5)	(311.4)	(17.5)	(23.0)	(8.3)	(5.6)

TABLE 2.8--ADEQUACY OF HIGH SCHOOL EDUCATION BY RACE AND SEX
(in percentages)

Adequacy of High School	Afro-American		Mexican/ Spanish-Am.		Caucasian		American Indian		Oriental American	
	M	F	M	F	M	F	M	F	M	F
Excellent To Good	39%	51%	45%	55%	48%	58%	21%	37%	41%	58%
Average	43	37	34	34	38	33	37	50	50	33
Below Average To Very Inadequate	18	12	21	11	15	9	42	14	8	9
Total	100	100	100	100	101	100	100	101	99	100
(Weighted N in Thousands)	(135.9)	(84.7)	(28.6)	(16.3)	(359.3)	(310.8)	(17.6)	(23.0)	(8.3)	(5.6)

while the remaining ethnic groups viewed high school as good to excellent (approximately 46 per cent of the Black, Spanish-speaking, Oriental, and White students rate high school in this manner). Female students rate both college and high school as more satisfying than do male students.

Age, Sex, Marital Status

Full-time students at community and junior colleges are older than their four-year college peers. Twenty-five per cent of the entering freshmen participating in the Project Focus survey report that they are 21 years of age or over as contrasted with only 7 per cent similarly classified in 1967 (see Table 2.9). While the age distribution in the four-year institutions continues to fall predominantly in the 18- to 20-year-old bracket, the two-year public and junior colleges have shown a steady rise in the enrollment of older students. Female students fall into a bi-modal distribution with 29 per cent in the 18 and under age group and 8 per cent in the 30 and over group (see Table 2.10). Male students are more normally distributed with 19 per cent in the 18 and under age group, 45 per cent in the 19 to 20 age group, 24 per cent in the 21 to 24 age group, and 12 per cent in the 25 years of age and over category. Since the Project Focus data reflects only the ages of the full-time student, the median age (20 years) is well below that of the total student enrollment, including both full- and part-time. Part-time students are reported elsewhere as having a median age of 27 years [24, p.70].

The older the student, the more likely it is that he will find his college experience satisfying. Table 2.11 reveals a consistent trend towards increased satisfaction as the age of the student advances. Note that the older the junior college student, the more polarized he becomes in his

TABLE 2.9--AGES OF ENTERING FRESHMEN IN TWO-AND FOUR-YEAR COLLEGE PROGRAMS BY YEAR OF ENROLLMENT
(in percentages)

Age	1967* 2 Yr.	1967* 4 Yr.	1970* 2 Yr.	1970* 4 Yr.	1971 2 Yr.**	1971 4 Yr.**
17 & Under	2%	6%	3%	4%	2%	4%
18-20	91	92	83	94	74	94
21+	7	2	15	2	25	2
Total	100	100	101	100	101	100

*Data taken from the American Council on Education's The American Freshman: National Norms.

**Data obtained from Project Focus survey.

TABLE 2.10--AGE DISTRIBUTION BY YEAR IN COLLEGE AND SEX
(in percentages)

Age	Freshman M	Freshman F	Sophomore M	Sophomore F	Total M	Total F
17 & Under	1%	2%	0%	0%	1%	2%
18	28	39	2	3	18	27
19-20	41	41	55	69	46	50
21-24	20	7	28	12	23	9
25-29	6	4	10	6	8	5
30 & Over	4	7	5	10	4	8
Total (Weighted N in Thousands)	100 (384.4)	100 (321.0)	100 (249.4)	100 (169.3)	100 (633.8)	101 (490.3)

views of college. The per centage who report that they are unsatisfied or completely unsatisfied remains relatively constant with age, however. It seems logical that the longer a student has to wait to obtain a college education, the high[illegible] the value he places on it.

Approximately 80 per cent of the students attending community junior colleges full time are single. Of those that are married, 85 per cent are 21 years and over (see Table 2.12). Sixty-four per cent of the married women are 25 years of age or over. Many of these women are resuming their formal education after their offspring have reached school age.

Four times as many married students as single students identify the GI Bill or veterans benefits as their principal source of income (see Table 2.13). Almost half of the single students look to their parents as a primary source of support, while 26 per cent of the married students depend on spouses as their primary base of support. Separated, divorced, and widowed students are more apt to depend upon loans, EOG grants, and work-study programs as their principal source of income.

Student Socioeconomic Background

Since students are the product of their socio-cultural experiences, these backgrounds need to be understood if appropriate learning experiences are to be designed with motivation and study habits in mind. Such factors as father's occupation, parental education attainment, and family income have been employed as indirect measures of a family's social-class position.

One of the more important determinants of socioeconomic status is the occupational role of the head of the household. Since 75 per cent or more of the respondents indicate that both parents are alive and still married,

TABLE 2.11--LEVEL OF SATISFACTION WITH COLLEGE BY AGE AND SEX
(in percentages)

Level of Satisfaction	18 & Under		19-20		21-24		25 & Over	
	M	F	M	F	M	F	M	F
Completely Satis. & Satis.	67%	72%	68%	72%	73%	80%	76%	89%
Indifferent	21	17	20	16	17	11	15	5
Unsatis. & Completely Unsatis.	12	11	12	12	11	10	9	6
Total	100	100	100	100	101	101	100	100
(Weighted N in Thousands)	(115.3)	(139.3)	(292.1)	(246.3)	(146.9)	(41.6)	(76.7)	(61.1)

TABLE 2.12--MARITAL STATUS BY AGE AND SEX
(in percentage)

Age	Single		Married	
	M	F	M	F
18 & Under	23%	32%	4%	4%
19-20	54	59	10	17
21-24	20	7	43	15
25 & Over	3	2	43	64
Total	100	100	100	100
(Weighted N in Thousands)	(504.2)	(396.2)	(102.4)	(64.5)

we assume that the head of household is the father. Table 2.14 presents the occupational role of fathers broken out by the race and sex of the full-time community and junior college student. Skilled and semi-skilled tradesmen are mentioned most frequently; about one out of three students indicates that this is the father's occupation. Managerial or executive is listed as the next most frequent occupation with about one out of six students identifying this category as the father's occupation. Eight per cent of the students list their fathers' occupations as professional; while six per cent identify semi-professional or technical level occupations. Small business owner or farm owner is indicated by 14 per cent of the students as their fathers' principal occupations and 9 to 10 per cent list fathers as supervisors or public officials. A little over 8 per cent of the student body identify their father's occupation as unskilled and the remaining 6 per cent of the students list their fathers as salesmen. When the responses are broken down by ethnic background and sex, both Black and Spanish-speaking male students report a higher percentage of their fathers work as unskilled laborers. In general, the occupational background of the fathers of White students is skewed towards the upper end of the occupational structure, while the reverse is true for those from minority group backgrounds. The data, when viewed from the perspective of the democratizing effect which community junior colleges have on students demonstrates that those from lower socioeconomic backgrounds are able to pursue higher education because of their access to a community junior college education.

There is some tendency for those enrolled in the college-transfer program to come from families where the fathers' occupations are managerial or executive. About two out of four students in the college-transfer program come from families where the fathers are managers or executives,

TABLE 2.13--MARITAL STATUS BY PRINCIPLE SOURCE OF FINANCIAL SUPPORT BY SEX (in percentage)

Source of Income	Single	Married	Separated, Divorced or Widowed
Parents	46%	8%	10%
Spouse	1	26	4
Employment or Savings	26	19	26
Loans or EOG	10	7	21
G.I. Bill or Vets Benefits	8	34	26
Scholarship or Grant	7	3	4
Other	2	3	9
Total	100	100	100
(Weighted N in Thousands)	(898.5)	(165.8)	(29.8)

TABLE 2.14--FATHER'S OCCUPATION BY RACE AND SEX

Occupation	Afro-American		Mexican/ Spanish-Am.		Caucasian		American Indian		Oriental American		TOTAL	
	M	F	M	F	M	F	M	F	M	F	M	F
Manager or Executive	15%	12%	12%	9%	16%	19%	16%	6%	3	18	16	17
Prof.	7	8	5	3	9	8	9	7	9	5	8	8
Semi-Prof. or Tech.	6	4	6	1	6	6	6	12	10	7	6	6
Supr. or Pub.Off.	8	8	8	5	11	10	8	5	8	9	10	9
Sm.Busi. or Farm Owner	12	11	13	13	16	15	17	10	28	31	15	14
Sales	8	6	4	8	6	7	8	12	1	2	6	7
Skilled or Semi-Skill.	33	34	31	38	31	30	29	40	36	19	31	31
Unskilled	11	17	21	22	6	6	8	7	5	9	8	9
Total	100	100	100	99	101	101	101	99	100	99	100	101
(Weighted N in Thousands)	(131.1)	(78.5)	(27.7)	(15.6)	(346.7)	(299.8)	(17.7)	(20.9)	(8.2)	(5.1)	(556.8)	(436.5)

whereas only 17 per cent of the career-oriented A.A. degree students come from such backgrounds. Two out of every five career-oriented students have fathers who were either skilled or semi-skilled workers, against three out of ten in the college transfer program.

There are few differences between students who come from white-collar backgrounds and those from blue-collar backgrounds in terms of expected income ten years after graduation. There is, however, a slight upward skewing of expected incomes among the students from managerial, executive, or professional backgrounds. Among the male students, for example, 50 per cent of the managerial, executive, and professional family background students expect to earn over $15,000 a year in ten years time. In contrast, 35 per cent of those listing their fathers as semi-skilled or unskilled workers state that they expect a $15,000 a year income or better in the next ten years.

A somewhat similar finding occurs when we compare the level of the father's occupational status with the student's expectations in terms of the overall level of educational attainment. Slightly more students (16 per cent) from managerial, executive, and professional backgrounds anticipate receiving a Ph.D., M.D., or L.L.B. Only 9 per cent of those from the semi-skilled or unskilled family backgrounds have similar aspirations. All in all, the occupational status of fathers does not differentiate significantly between various students' levels of aspiration. The fact that they are enrolled in college seems to have an equalizing effect on the level of aspirations of all students.

Cross tabulating the highest educational attainment level of the father with the student's own educational aspirations again reveals little relation-

ship between a student's socioeconomic status and his educational aspiration level. Approximately 36 per cent of all students aspire to a B.A. degree, and this holds whether the father has less than a high school education or is a college graduate. Approximately one out of five students hope to achieve an A.A. degree, and about 35 per cent of the students aspire to a graduate degree. This suggests that even the first generation college students (first in their families) have learned to aspire to as high a level of educational attainment as possible regardless of their socioeconomic background.

In addition to the head of the household's occupational and education attainment level, estimated family income can also serve as an index of socioeconomic status. To avoid the confusion of "family income," the student was asked to indicate his parents' income before taxes. Our earlier analysis revealed that the overall distribution of parental incomes matched that for the United States as a whole. For purposes of this analysis, students were grouped into three categories -- low, medium, and high -- to facilitate cross tabulations. All parental income below $5,000 is designated as the low income category. Five thousand to $14,999 is rated as medium, and $15,000 and above is high. Seven per cent of all students fall into the low classification; 37 per cent identify themselves as in the middle range; and 33 per cent are classified as in the high parental income bracket. Twenty-two per cent of the students indicate they did not know, or considered this information confidential. Slightly more than half (52 per cent) of the low-income students are female while three out of five (60 per cent) in the middle or high category are males.

Parental income when cross tabulated with the student's principal source of income reveal that the low-income student depends much more

upon loans and EOG grants as his principal source of income than does the high parental-income student. Twenty-five per cent of the male students falling into the low parental-income bracket identify the GI Bill or veterans benefits as their source of income, as contrasted with only 16 per cent of the high parental-income students (see Table 2.15). Seventy-two per cent of the high parental-income male students identify their parents, spouses, and employment or savings as principal sources of income, in contrast with only 52 per cent of the low parental-income students. It is reasonable to expect that more of the low-income students would have availed themselves of NDEA loans, EOG grants, and scholarship aid had it been available to them. Our interviews revealed, however, that because such students are often the last to apply, a good proportion of the monies available is often already allocated. The distribution and utilization of federally sponsored student aid programs needs further evaluation before a definitive statement on its utilization by low-income students can be determined.

Surprisingly, a larger per centage of low-income students are enrolled in private junior colleges than in the public community colleges. Table 2.16 reveals that 15 per cent of private junior college students and only 9 per cent of the public junior college students fall into the low-income bracket. The reliability of these findings may be open to question, however, because of the relatively large number (30 per cent) of the private junior college students who either did not know their parental income status or did not want to provide that information.

As one might expect, the lower income students come from families where the father was identified as either semi-skilled or unskilled. Similarly, low-income students are much more likely to have fathers whose educational attainment level is less than high school.

TABLE 2.15--FAMILY INCOME LEVEL BY PRIMARY SOURCE OF FINANCIAL SUPPORT
(in percentages)

Level of Family Income*	Primary Source of Financial Support														(Weighted N in thousands)	
	Parents or Spouse		Employment or Savings		Loan or EOG		G.I. Bill		Scholarship or Grant		Other		Total			
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Low	29%	51%	22%	18%	13%	18%	25%	4%	6%	6%	4%	4%	100%	101%	(38.2)	(38.7)
Medium	29	40	31	24	11	18	20	6	7	10	2	2	100	100	(251.6)	(167.4)
High	42	60	30	21	6	9	16	4	3	5	2	2	99	101	(226.9)	(148.9)

TABLE 2.16--FAMILY INCOME LEVEL BY TYPE OF INSTITUTIONAL GOVERNANCE
(in percentages)

Level of Family Income *	Public	Private	Total
Low	9%	15%	10%
Medium	48	41	48
High	43	44	43
Total	100	100	101
(Weighted N in Thousands)	(812.3)	(69.5)	(881.8)

*Respondents who did not know their parents' income or who did not want to provide the information have been eliminated from this table.

Low-income students aspire to the same level of income ten years from now as those from the higher-income family backgrounds. About one out of three students from both the low and high parental-income categories expect to earn $15,000 or more per year ten years after graduation. This finding reinforces our earlier observation that those students from low-income backgrounds who manage to enroll in college share the same levels of aspiration as those from middle- or higher-income brackets. The same observation holds true for educational aspirations -- as many low-income as high-income students expect to go on to a master's or graduate-level training before completing their formal education. Whether the low-income students come to college because of their upward mobile aspirations or acquire them after enrollment cannot, of course, be determined by the data. It is appropriate to observe, however, that community and junior colleges do raise the aspiration levels of the disadvantaged and the minority student.

Faculty Characteristics

Having completed our analysis of the characteristics, aspirations, and attitudes of students, we are now in a position to evaluate the qualifications of the community and junior college faculty and their ability to accomodate such a diverse array of student interests and needs. Not a great deal is known about the junior college faculty other than normative data on degrees earned, salary status, and previous work experience. How satisfied they are with their work and how they see themselves in comparison with the facilty members of other institutions of higher education has been the focus of only a few studies [23]. What training they have received and the value of that experience has been a point of contention of critics

and supporters of junior colleges for years. Their previous experience, aspirations, and attitudes about their work will serve as the focus of our discussion during the remainder of the chapter.

First, a brief note concerning the survey instrument before moving on. Limited dollar resources made it necessary to restrict the questionnaire administered to a representative cross-section of faculty to a preprinted optical scan answer sheet. This in turn restricted the number of questions and range of responses made available to the respondents. Key demographic data such as questions on age and socioeconomic status had to be left out. What follows is a synthesis of information taken from two or three recent studies, including, of course, the findings from the Project Focus investigation.

The full-time community and junior college teaching staff is predominently White and male. Women constitute less than 30 per cent of the full-time faculty. Ninety-two per cent of the faculty are White with the remainder equally distributed among Blacks, American Indians, Mexican or Spanish-speaking Americans, and Oriental-Americans (See Table 2.24). The lack of representativeness of minority faculty members in spite of a greatly expanded enrollment of minority students recently should be, and is, a cause for concern.

In a recently published study conducted by the Bureau of Social Science Research /24, p. 206/, 55 per cent of the full-time faculty of public junior colleges came from families where fathers were employed in either professional, managerial, clerical, or sales roles. Thirty-five per cent were from blue collar backgrounds. Interestingly enough, in the same study, fewer than one-fifth of the full-time faculty reported fathers with a

college or graduate degree. Approximately 43 per cent reported that their fathers had less than a high school diploma. More female than male full-time faculty members reported fathers with higher degrees.

Junior college faculty members are predominently non-urban in background [24, p. 209]. Approximately 40 percent grew up in a rural or small town environment. One-third came from a truly urban setting, having lived in cities larger than 100,000.

These background characteristics, with the significant exception of ethnic status, demonstrates that the full-time faculty members of community and junior colleges come from backgrounds comparable to those of the students whom they teach. Such backgrounds could be described as lower middle-class, non-urban, and semi-professional. How well the upward mobile faculty member accepts students from comparable or lower socio-economic status opens to question the ability of such teachers to empathize with their students. Add to this the observation that most faculty have had a limited exposure to other than the academic world and the problem is further compounded. While it is dangerous to make sweeping generalizations, one obvious conclusion is that many of those trained and employed in the role of teacher in a community junior college have credentials acquired in the university environment that is geared to a different kind of student.

Occupational Qualifications and Experience

Full-time faculty at the community and junior colleges are a relatively inexperienced group. Almost one-third have been teaching for five years or less. Those who teach the liberal arts courses are slightly more ex-

perienced than those in the occupational programs (see Table 2.17).[1] Forty-three per cent of the liberal arts or academic faculty indicated that they had eleven or more years of teaching experience compared to 33 per cent of the occupational faculty.

Of those who were employed in other educational institutions before accepting their present appointment, 38 per cent were employed in a high school, 11 per cent worked in an elementary or junior high school, and 27 per cent served as faculty members of a four-year college or university. These findings compare favorable with the staff backgrounds reported by Metzger and Tillery /40/ and Godfrey and Holmstrom /24/. As might be expected, one out of five of the occupational faculty came to their present role from a vocational high school or technical institute whereas only 3 per cent of the liberal arts faculty did so (see Table 2.18). Godfrey and Holmstrom /24, p.231/ found that only 15 percent decided to become junior college instructors after they had already started another career.

Three out of four community and junior college faculty members have their master's degree. Five per cent have completed their Ph.D. or Ed.D. Table 2.19 compares the academic and occupational faculty in terms of their highest degree held. Ninety per cent of the academic faculty have a master's degree or higher, while only 52 per cent of the occupational faculty have achieved this level of educational attainment. Many of the occupational faculty chose education as their profession after spending a number of years in another field, presumably related to their area of specialization. However, the gap between the education attainment

1. Faculty members were classified as "academic," or "occupational" according to their departmental affiliation. Those rated as "unclassified" failed to indicate their departmental status.

TABLE 2.17--YEARS TAUGHT BY ACADEMIC-OCCUPATIONAL ORIENTATION
(in percentages)

Years	Academic	Occupational	Unclassified	Total
1-5	28.9%	44.0%	17.2%	31.9%
6-10	29.2	26.5	29.5	28.6
11-15	19.2	12.0	23.0	17.7
16-20	9.1	7.6	13.4	8.9
21-25	6.2	5.5	5.7	6.0
26-30	2.9	1.5	5.4	2.7
31-35	3.1	1.7	2.3	2.8
36+	1.3	1.2	3.5	1.4
Total	100.0	100.0	100.0	100.0
(Weighted N in thousands)	(48.5)	(15.5)	(2.6)	(66.6)

TABLE 2.18--PREVIOUS EMPLOYMENT BY ACADEMIC-OCCUPATIONAL ORIENTATION
(in percentages)

Type of School	Academic	Occupational	Unclassified	Total
Elementary-Junior High School	12.3%	4.1%	12.7%	10.7%
High School	40.4	30.0	29.1	37.9
Vocational, Technical High School	1.7	7.6	3.1	2.9
Technical Institute	1.5	10.9	1.5	3.3
Junior-Community College	10.4	11.5	13.8	10.8
Four-Year College, University	28.5	21.1	21.9	26.8
Other	5.2	14.8	17.9	7.6
Total	100.0%	100.0%	100.0%	100.0%
(Weighted N in thousands)	(35.3)	(8.8)	(2.0)	(46.1)*

*The large block of non-respondents (approximately 32 per cent) is due to those who had not taught elsewhere or failed to respond to the question.

level of occupational instructors and those in the academic field is in the process of being reduced as almost half of the occupational faculty are currently enrolled in an advanced degree training program (see Table 2.20). One out of three of the liberal arts faculty are similarly enrolled. Six per cent of those seeking advanced degrees are working towards their Ph.D. or Ed.D.

One might well ask how appropriate this form of additional graduate study is for those expected to teach junior college. Teachers who are confronted with a heterogeneous population of students, many from unfamiliar cultural backgrounds, might better spend their time in study of the ethnic heritage and cultural environment of the students they will teach. Learning to prepare course objectives or to construct performance tests, while important ingredients in fulfilling one's teaching responsibilities, does not necessarily aid the instructor in empathizing with his students or helping them achieve higher levels of self-confidence. Unfortunately, many graduate school programs follow the traditional university pedagogy and are not geared to attend to the unique functions of the junior college.

Dr. Roger Garrison, former Vice President of Briarcliff College, now with Westbrook College in Maine, in his seminal study of the junior college faculty [23, p. 15] made the following observations concerning teachers at two-year postsecondary institutions:

> Markedly different ..are his conditions of institutions, his aims, and his professional philosophical attitudes toward his task. Not simply a post-high school instructer of grades thirteen and fourteen, he is, in his own view, a colleague in a new kind of collegiate effort, as yet ill-defined and in furious flux. He is unsure of his status in the educational spectrum, for he fits few traditional categories. He is aware that he is being asked to function professionally in an unprecedented situation, and he

TABLE 2.19--HIGHEST DEGREE HELD BY ACADEMIC-OCCUPATIONAL ORIENTATION
(in percentages)

Degree	Academic	Occupational	Unclassified	Total
High School	0.7%	11.6%	5.4%	3.4%
A.A., A.A.S., A.S.	0.6	6.9	4.2	2.2
B.A., B.S., B.Ed.	9.2	29.4	10.3	13.9
M.A., M.S., M.Ed.	82.6	51.6	71.7	75.0
Ph.D., Ed.D.	6.9	0.5	8.4	5.5
Total	100.0%	100.0%	100.0%	100.0%
(Weighted N in thousands)	(48.5)	(15.3)	(2.6)	(66.4)

TABLE 2.20--DEGREE PRESENTLY SOUGHT BY ACADEMIC-OCCUPATIONAL ORIENTATION
(in percentages)

Degree	Academic	Occupational	Unclassified	Total
High School	1.7%	2.2%	13.1%	2.4%
A.A., A.A.S., A.S.	0.5	3.9	2.6	1.5
B.A., B.S., B.Ed.	1.9	19.6	2.6	6.7
M.A., M.S., M.Ed.	21.7	49.7	19.1	29.1
Ph.D., Ed.D.	74.2	24.6	62.6	60.3
Total	100.0	100.0	100.0	100.0
(Weighted N in thousands)	(16.1)	(6.4)	(1.2)	(23.6) *

*Non-respondents presumably are those not enrolled in a degree-oriented program.

is deeply concerned about his professionalism, in the best sense of that term.

The proliferation of new junior colleges during the past decade has created a new market for instructors who are neither research oriented nor necessarily committed to a single academic discipline. In contrast with the pronouncements of some authorities, most junior college administrators are not seeking recent Ph.D.'s steeped in the tradition of a graduate school education. First, and foremost, they want capable teachers. Junior college instructors must be able to meet the needs of a locally based constituency, some of whom are disadvantaged, some of whom are older, and many of whom are part-time students. They must be able to relate to, empathize with, and reinforce their students. Unfortunately, there is neither the time nor space to offer suggestions on ways to improve upon preservice and inservice training; suffice it to say that the present teacher training system for those about to enter the portals of junior colleges needs overhauling. More will be offered on this point in Chapter 4.

Career Aspirations

When asked to indicate where they expected to be five years from now, 80 per cent of those who expected to remain in the education field indicated that they hoped to be teaching in a community or junior college (see Table 2.21). Fourteen per cent hoped to move on to a four-year college or university. . those who predicted that they would not be in education within five years, 37 per cent expected to retire and the remainder were distributed across such commitments as marriage, employment in private industry, or self-employment. It should be noted that only 15 per cent of the total population of full-time faculty predicted tha they would no longer be actively involved in education five years hence.

TABLE 2.21--EXPECTED EMPLOYMENT FIVE YEARS FROM NOW
BY ACADEMIC-OCCUPATIONAL ORIENTATION
(in percentages)

Employment	Academic	Occupational	Unclassified	Total
Educationally Oriented				
High School	0.3%	0.3%	--- %	0.3%
Vocational-Technical Institute	1.9	9.4	3.0	3.5
Junior-Community College	80.5	79.2	82.7	80.3
Four-year College, University	15.4	9.6	13.3	14.1
Other	1.9	1.5	1.0	1.8
Total	100.0%	100.0%	100.0%	100.0%
(Weighted N in thousands)	(42.4)	(11.9)	(2.0)	(56.2)
Non-Educationally Oriented	Academic	Occupational	Unclassified	Total
Marriage	9.3%	18.5%	5.1%	13.0%
Private Industry	9.8	30.7	8.3	16.2
Government	2.5	3.5	--	2.6
Self-employed	16.2	9.3	13.8	14.8
Retired	48.7	18.5	19.4	37.1
Other	3.7	4.9	8.3	4.3
Undecided	9.8	14.6	5.1	12.0
Total	100.0%	100.0%	100.0%	100.0%
(Weighted N in thousands)	(4.1)	(2.1)	(0.4)	(6.6)

Few differences occur when the academically and occupationally oriented faculty are compared on this dimension. Of the academic faculty who predict that they will not be affiliated with an educational institution, almost half expect to retire while only 18 per cent of the occupationally oriented faculty will do so. On the other hand, a larger percentage (31 per cent) of the occupational faculty anticipat. that they will return to or take up employment in private industry.

Table 2.22 indicates that only 3 per cent of the total faculty group were thinking of leaving their educational role for another type of occupation. This finding closely parallels that of the Godfrey-Holmstrom sutdy [24,p.18]. The relatively few that want to change jobs yet remain within the field of education indicate that they expect to move on to a four-year college or university.

While the actual numbers are small, and should therefore be interpreted with caution, a higher proportion of the occupational faculty expect to change from the role of educator to something else. The occupational instructor teaches more hours than his academic counterpart. He is more likely to be Caucasian, and as we saw earlier, is not as well trained as a teacher (in terms of degrees earned). (See Tables 2.23 and 2.24). We can only hypothesize that minority faculty members are not as likely to teach occupational courses because only recently were such opportunities opened to them. Those who did achieve graduate degrees were channeled or chose to go into other fields.

Breaking the faculty population down by highest degree held against future plans (see Table 2.22), those with higher degrees not only are more likely to remain in education but want to remain in a community junior college.

TABLE 2.22--EXPECTED EMPLOYMENT FIVE YEARS FROM NOW BY HIGHEST DEGREE OBTAINED -- FULL-TIME FACULTY
(in percentages)

Expected Employment	Highest Degree Obtained				
	A.A. Degree	B.A. Degree	M.A. Degree	Ph.D. or Ed.D.	Total
Educationally Oriented					
Community-Junior Col.	56%	64%	76%	57%	73%
Vocational-Technical Center	14	10	1	--	2
College or University	2	9	13	24	13
Other	2	1	2	8	2
Non-educ. Oriented					
Retirement	2	1	4	7	4
Business and Industry	20	9	2	2	3
Undecided or Other	5	6	2	2	3
Total	101	100	100	100	100
(Weighted N in thousands)	(1.15)	(8.12)	(47.1)	(3.33)	(59.7)

TABLE 2.23--CLASS HOURS SPENT IN ACTUAL STUDENT INSTRUCTION
BY ACADEMIC-OCCUPATIONAL ORIENTATION
(in percentages)

Number of Hours	Academic	Occupational	Unclassified	Total
0-10	15.0%	9.6%	48.9%	15.3%
11-15	45.5	25.1	20.9	39.6
16-20	23.5	29.6	16.0	24.6
21+	16.0	35.7	14.2	20.5
Total	100.0	100.0	100.0	100.0
(Weighted N in thousands)	(48.7)	(15.6)	(2.8)	(67.2)

TABLE 2.24--FULL-TIME FACULTY MINORITY GROUP STATUS
BY ACADEMIC-OCCUPATIONAL ORIENTATION
(in percentages)

Ethnic Status	Academic	Occupational	Unclassified	Total
Nonminority Caucasian/White	92.0%	93.5%	83.8%	92.1%
Minority				
Afro-American/ Black	1.7	0.9	1.3	1.5
American Indian	1.1	0.3	3.4	1.0
Mexican/Spanish American	1.4	0.8	5.5	1.4
Oriental Amer.	0.8	1.6	2.1	1.0
Other	1.3	1.2	1.3	1.3
Not Responding	1.7	1.6	2.5	1.7
Total	100.0	100.0	100.0	100.0
(Weighted N in thousands)	(48.4)	(15.5)	(2.4)	(66.3)

Twenty per cent of those holding an A.A. degree expect to be working elsewhere, whereas only 4 per cent of those with an M.A. degree or above might do so. Twenty-four per cent of those with Ph.D.'s hope to move on to a four-year college or university, making it evident that many of this group view the junior college as a way station in their career.

Faculty Attitudes Toward Work

The overall level of satisfaction as reported by full-time faculty in community junior colleges is high. Ninety-one per cent indicated that they were completely satisfied or satisfied with their college while only 5 per cent responded at the opposite end of the scale. Three and one-half per cent stated that they were indifferent. There are essentially no differences in the level of satisfaction of the academic and occupational faculty, although a slightly higher per cent of the academic group indicated that they were completely satisfied (20 per cent as against 15 per cent of the occupational faculty members).

When asked which of the following aspects of their job they dislike most, 16 per cent of the respondents indicated that they did not have enough time to prepare adequately for their classes or to keep themselves up-to-date. A little over one-third saw no drawbacks in their present role. Twenty per cent of those teaching in private junior colleges complained that the biggest drawback of their job was working with unappreciative or unmotivated students. Only 10 per cent of the public junior college instructors responded in a like manner. It is apparent from these findings that most of the faculty members find few drawbacks with their work.

The majority of community and junior college faculty members feel that they have a harder job than those in the four-year colleges. Sixty-three

per cent of the respondents indicated that they agreed with this statement. In terms of job importance when compared with faculty members of four-year institutions, slightly more than 60 per cent of the junior college faculty agreed that their work was more important. Again, there was essentially no difference between the academic and the occupational faculty.

Over the last decade, a number of researchers [43] have expressed concern over whether or not junior college faculty members strongly support the stated purposes of their institutions. Our data, while not definitive, supports Metzger's observation [39] that some faculty identify more closely with the faculties of four-year institutions than they do with their colleagues in the junior colleges. Almost a third of the survey respondents felt that junior colleges should be more selective than they presently are. A later analysis of the faculty support for selected goals of the junior colleges also demonstrates that many faculty do not endorse the concept of the open door. The position is understandable when one realizes that the responsibility for educating a mixture of low achieving or underachieving students with the more able students falls squarely on the shoulders of the faculty. It is, nevertheless, one of the major tenants of the community college program. Faculty members who are unable, or do not want, to accept this responsibility probably ought to seek work in other types of institutions. Unfortunately, the brevity of the questionnaire did not permit more of an in-depth examination of the rewards and frustrations which the faculty at two-year postsecondary institutions experience in their work. This clearly is a topic worthy of further investigation.

Additional evidence of the faculty's reluctance to support a completely open door policy will be presented in the next chapter. While progress is being made toward the establishment of more harmonious views among our three groups of respondents, students, faculty, and presidents, total agreement has not, nor, in all probability, ever will be achieved.

Contrasting Perceptions of Students and Faculty

Both students and faculty participating in the survey were asked to respond to a series of questions dealing with college policies, practices, facilities, and services (see Exhibit III , Questions 41 through 67). The respondents were asked to rate the policies, practices, or facilities at their institutions on the basis of their agreement, partial agreement, or disagreement with the statement posed. They were also asked rate student services in terms of whether or not the service was found to be extremely valuable, worthwhile, of little benefit, or never used. Tables 2.25 and 2.26 summarize the findings.

More faculty than students felt that the rules governing the invitation of controversial speakers are reasonable. More students than faculty, on the other hand, felt that adequate provisions are being made for gifted students.[1] Both faculty and students agree that instructors are generally available for assistance with classwork when needed. The fairness of examinations is also jointly perceived as acceptable with approximately 50 per cent of both students and faculty agreeing on this point.

1. The high number of "no opinion on the matter" registered by students reflects their lack of interest or awareness of their institution's position on this issue. The fact that two-thirds of the faculty either partly disagree or completely disagree with the institutional policy or program indicates that this is an area deserving of additional attention.

TABLE 2.25--STUDENT AND FACULTY PERCEPTIONS OF COLLEGE POLICIES, PRACTICES, AND FACILITIES
(In percentages)

Nature of College Policies, Practices, and Facilities	Student or Faculty Perceptions	Agree	Partly Agree or Disagree	Disagree	No Opinion	Total
Rules governing the invitation of controversial speakers are reasonable	S	37%	23%	12%	28%	100%
	F	57	15	6	22	100
Regulations governing academic probation and dismissal are sensible	S	50	21	11	18	100
	F	61	24	10	5	100
Examinations are usually thorough and fair	S	46	39	11	4	100
	F	52	31	5	12	100
Instructors are generally available for assistance with classwork	S	67	23	6	4	100
	F	69	22	5	4	100
Adequate provision is made for gifted students (e.g., honors programs, independent study, undergraduate research, etc.)	S	28	19	13	40	100
	F	20	36	32	12	100
Students have ample opportunity to participate in college policy making	S	27	29	20	24	100
	F	39	33	18	10	100

TABLE 2.26--STUDENT AND FACULTY PERCEPTIONS OF COLLEGE SERVICES
(in percentages)

Type of College Service	Student or Faculty Perceptions	Extremely Valuable	Worthwhile	Of Little Benefit	Never used	Not offered or available	Total
Academic advising service (assistance in selecting courses, adjusting schedules, planning programs, etc.)	S	25%	38%	22%	13%	2%	100%
	F	36	48	15	--	1	100
Counseling service (assistance in choosing a major, vocational planning, resolving personal problems, etc.)	S	21	31	22	24	2	100
	F	30	51	17	1	1	100
Orientation service (assistance in getting started in college--learning the ropes, getting acquainted, overcoming apprehensions, etc.)	S	16	29	25	24	6	100
	F	23	47	25	1	4	100
Developmental education services (improvement of reading, study skills, spelling, etc.)	S	13	17	9	53	8	100
	F	41	41	7	3	8	100
Financial needs service (assistance in obtaining a scholarship, loan, part-time job; or assistance in budgeting and controlling expenses)	S	19	15	12	51	3	100
	F	48	46	4	1	1	100

Regarding who has the right to participate in college policy making, more faculty than students felt that students do have ample opportunity to participate. Three-fourths of the faculty and a little over half of the students agree or partly agree with this statement. One out of four students, however, had no opinion on the matter. This lack of interest is somewhat surprising when one considers the number of protests mounted by students in support of their interest in a larger role in policy making. The next chapter will explore this issue in greater depth. What is significant here, however, is the fact that a number of junior college students do not have strongly-held views on the matter.

The type of college services available to students often dictate the extent to which students are willing or able to maintain their enrollment. The commonality of viewpoint where, for example, both students and faculty perceive a particular service as extremely valuable provides a useful assessment of just how useful a given service is. It must be recognized that the findings presented here are intra-college and individual institutional differences may be disguised or muted in the process of aggregation. As a nationwide assessment, however, the findings should be of some interest.

A little over one-third of the total student population surveyed reported that they found the academic advising service, e.g., assistance in selecting courses, adjusting schedules, planning programs, etc., either of little benefit or never used. Eighty-four per cent of the faculty, however, rated such a service as worthwhile or extremely valuable. Clearly those responsible for providing this service have not been able to sell a sizeable portion of the student body on the benefits to be derived.

A similar finding emerges from the student and faculty rating of the

counseling service, e.g., student assistance in choosing a major, finding a vocation, resolving personal problems, etc. Forty-six per cent of the students rated this service as of little benefit or never used while 81 per cent of the faculty thought it worthwhile or extremely valuable. Such a discrepency in perceptions puts the counselor squarely on the spot. How such a difference in views can occur at institutions which pride themselves in the offering of counseling assistance warrants further investigation.

Financial counselors, on the other hand, receive better marks for their provision of information, on scholarships, loans, part-time jobs, and even advice on budgeting. Of those students who avail themselves of this service, three-fourths of them find it extremely valuable or worthwhile. A surprisingly large percentage (51 per cent), however, stated that they have never used or consulted a financial aid officer. One can speculate that some portion of this group are not even aware that such a service exists. The others, hopefully, do not require such assistance. Ninety-four per cent of the faculty concur that this is an extremely valuable or worthwhile program.

Low income students from minority backgrounds found the financial needs service more valuable than did White students of comparable family incomes. Forty four per cent of the minority students with family incomes of less than $5,000 a year rated the service as valuable or extremely valuable while only 31 per cent of the low-income White students did so. Even so, 39 per cent of the low-income minority students and 54 per cent of the low income White's reported that they never used the service.

Developmental education programs were seen by those students pre-

sumably participating in such programs as worthwhile. Approximately three out of four students benefiting from developmental education programs rated the service as extremely valuable or worthwhile. Slightly over half of the total student group, however, had never been involved. Eighty-one per cent of the faculty gave this effort their endorsement. This chapter will explore more fully the problems surrounding what is one of the more difficult yet important efforts in the community and junior college field. While the data reported here give it reasonably good marks, studies elsewhere have opened to question the ultimate effectiveness of such a program.

Providing students assistance in getting started in college, helping him learn the ropes and get acquainted, received a less than enthusiastic rating from both students and faculty. Twenty-four per cent of the students reported that they never received such assistance and of those that did, one-third reported that it was of little benefit. Twenty-five per cent of the faculty agreed with this rating, while a slightly less than half thought of it as worthwhile. Looking at it from the vantage point of the "new" student, such an orientation (or lack thereof) may well spell the difference between satisfaction with one's experiences in college or a sense of alienation.

From this cursory analysis of student and faculty perceptions of various student service programs, we can conclude that those responsible for the delivery of such services leave something to be desired and much to be accomplished. The next chapter will expand this type of intra-institutional comparison and incorporate the viewpoints of the chief executives who are held primarily responsible for the overall operation of these institutions. How students, faculty, and presidents compare in the rank

ordering of a selected set of goals and how they weight each goal in terms of promise and practice will be its principle message.

CHAPTER 3

INSTITUTIONAL GOALS AND PRIORITIES

Any attempt to compare the long-range goals with the current practices of the nation's community and junior colleges must perforce answer the question: Which are the goals that these institutions are to serve? This chapter will attempt to provide evidence in support of the observation that among the 12,800 or so respondents to our goal inventory that there is an emerging consensus on the multiple purposes to be served. Such a consensus among community and junior college personnel contrasts dramatically with the agony of debate surrounding the proper role or function of other forms of higher education. Current pressures on the four-year colleges and universities have forced these institutions to take on new roles at a time when their dollar resources are shrinking. While these same pressures are also being felt at the two-year college level, they are being met with a sense of assurance that the right purposes are being pursued.

Students, parents, lay leaders, and politicans are no longer accepting the prescriptions of college and university administrators as unchallengeable. Many of these same people seem to feel that community colleges are offering an attractive alternative to full-time enrollment in four or more years of postsecondary education. The growth in the number of well paying and socially useful occupations requiring less than a baccalaureate degree, the shifting values and attitudes toward work, the high cost and competitiveness of higher education, and the growing awareness that continuing educational opportunities are and

will be available throughout one's working career, such perceptions have conspired to lessen the demand for the traditional four-year degree. For the first time in decades, freshman enrollments are down. The Carnegie Commission [16] estimates 110,000 unfilled openings this academic year ('70-'71), except in public community colleges. They continue to expand at a rate of 8 per cent per year.

It is inaccurate to imply that tranquility reigns on every community or junior college campus, however. The major purpose of this chapter will be to pinpoint where similarities and differences in the collective perceptions of students, faculty, and presidents exist, and to suggest the underlying causes of these differences. Long-range goals and current practices within a particular institution as perceived by the various groups making up the institution, were assessed by means of questionnaires administered to representative samples of students and faculty and to the chief administrator of the institution. Our analysis enabled us to contrast and compare the perceptions of these three groups with institutions of like size (number of students enrolled), age (date organized), and type of governance (public or private).

A brief description of the procedures employed during this phase of the study is needed. Students, faculty, and presidents drawn from our cross-sectional sample of institutions were requested to respond to a series of goal statements taken from the Educational Testing Service's Institutional Goals Inventory (IGI).[1] Copies of the instruments employed are provided in Appendix D. Respondents were asked to rate each goal

1. The items selected for this study were part of a larger instrument developed by the Educational Testing Service (ETS). This modified instrument was adapted and reproduced with their permission. Institutions wishing to administer this inventory will be able to compare mean scores and perceptions obtained with normative data available through ETS.

item in two ways: first they were asked to rate the items in terms of how much emphasis is being placed on the goal at their institution at the present time and second, the items were to be rated in terms of what the institution's goals should be during the coming decade. Each goal statement was rated on a five-point scale -- with regard to the perception of present emphasis, the respondents were asked to rate the items on a five-point scale from (1) "emphasized very strongly" down to (5) "emphasized not at all." In terms of what the institution's goals should be, the "preferred" goals, they were asked to judge the degree of importance of the goal item on a five-point scale in terms of whether the item was (1) "of extremely high importance" down to (5) "of no importance."

The original intent of ETS was to develop a goal inventory for use by colleges and universities as a means of defining their goals and establishing priorities among them [51]. The staff of Project Focus modified the inventory for specific use in the community and junior colleges. Because of time and space limitations in the questionnaires administered to student and faculty groups, only 12 goal statements were employed. Presidents were asked to respond to 26 goal items in terms of their present and future emphasis.

Mean scores and the rank order of all goal statements were calculated for two of the three groups of respondents (presidents and faculty) and cross-tabulated for public and private colleges. Relevant institutional characteristics were analyzed to determine the extent to which differences in perception were associated with such characteristics. An index of innovativeness was developed for the purpose of rank ordering institutions on this dimension, but, unfortunately, was not utilized. Appendix B briefly describes how this was to be

derived. Institutional discrepancy scores were developed for the purpose of assisting presidents and other concerned persons at a given institution in the evaluation of their own institution's status and are available for use by the individual institutions if needed.

The "goals"[2] of an institution are to be differentiated from its "objectives" in that they reflect the broader, longer term commitments of that institution. Objectives tend to represent more specific and tangible statements which describe the end of an action or represent an intermediate step directed towards a more distant goal. This definition is meant to encompass program objectives, course objectives, student personnel objectives, etc. -- the determination of which is primarily the responsibility of the relevant professional responsible

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2. Words such as "goal," "function," and "purpose," are often employed interchangeably. For the purposes of this paper, however, the following working definitions are suggested: (1) Function will refer to activities that are functionally allied with other social institutions. Such roles are to be viewed in the context of the larger social system. The "cooling out" function, the custodial function, and the certification function represent some of the more noteworthy examples of the "function" of community and junior colleges in the larger social order. (2) Purpose will be used to describe the mission or collective output of a type of community college, e.g., the private, independent colleges. Such purposes, while politically determined, reflect the compromises and adjustments of the collective institutions in question. The vested interest of those involved in these systems such as administrators are often traded off or modified to accommodate the expectations of external groups. (3) Goals refer to the expected outputs and/or priorities of a single college. In the same way that purposes are arrived at for a number of institutions, institutional goals generally emerge through a series of compromises or political accommodations rather than through a more deliberate or rational process. The greater the number of constituent groups involved, the greater the degree of compromise required. Some institutions enjoy greater autonomy with regard to how priorities in the campus community are treated. Thus the goal definitions of private institutions may reflect a higher degree of rationality than public institutions. For a more complete review of the literature on institutionalized goals, see Richard E. Peterson, The Crisis of Purpose: Definitions and Uses of Institutional Goals, ERIC Clearinghouse on Higher Education, Washington, D.C., Report No. 5, 1970.

for the particular program in question. While goals frequently emerge from the deliberations of concerned groups within an institution, objectives can also be arrived at in a more deliberate and rational manner by professionals in the performance of their assigned roles.

"Output" goals, as distinguished from "support" goals, refer to the collective actions of those involved in a given institution as it attempts to carry out its various commitments, e.g., providing higher educational opportunities to all youth from the surrounding community. "Process" goals represent a variety of activities designed to help the organization function in its environment while at the same time facilitating its achievement of the expected level of "output" [25]. The classification of the goal items employed in the study into these two categories is presented in Appendix C.

Present and Future Priorities

The president of a local institution has the primary responsibility for determining the substance and levels of priority of his institution's goals, but does so with the advice and consent of others within the institution. Consequently, the president's perceptions of the perceived and preferred goals were solicited. The extent of agreement between the presidents' perceptions and those of the faculty and students at his institution were also ascertained. By comparing the viewpoints of all three groups, shared expectations and points of tension were highlighted. It was hoped that such information would be of use to policymakers within the institutions involved as well as form the basis for this national perspective.

Looking at the total sample of institutions, there is a high degree of congruity in the rank ordering of goals by presidents and faculty

(See Table 3.1). Serving the higher educational needs of youth from the

TABLE 3.1--PRESIDENTS' AND FACULTY PERCEPTIONS OF THE TOP SIX GOALS FOR THE 70's

(Rank Order of Preferred Goals)

	Presidents	Faculty
1.	Serve higher education needs of youth from local community	Help students respect own abilities and limitations
2.	Respond to needs of local community	Serve higher education needs of youth from local community
3.	Help students respect own abilities and limitations	Help students adapt to new occupational requirements
4.	Help students adapt to new occupational requirements	Respond to needs of local community
5.	Re-educate and retrain those whose vocational capabilities are obsolete	Ensure faculty participation in institutional decision making
6.	Make financial assistance available to any student who wants to enroll in college	Re-educate and retrain those whose vocational capabilities are obsolete

surrounding community, helping students develop a respect for their own abilities and an understanding of their limitations, responding to the needs of the local community, and helping students acquire the ability to adapt to new occupational requirements as technology and society change, all fall into the top third of the desired or preferred goals across institutions as judged or ranked by these two groups.

Presidents tend to emphasize responding to community needs more strongly, while faculty place greater stress on the students' personal development. Note that serving the higher educational needs of youth from the local community rated at or near the top for both groups, indi-

cating a high degree of congruence or support for this output goal.

Few dramatic changes occur when the respondents were asked to rate the various goal items in terms of how much emphasis was now being placed on a particular goal. A comparison of the presidents' and faculties' responses to the actual goals (in terms of the degree of current emphasis) reveals that only one goal item moved from a middle level priority as listed by presidents to a higher priority when rated by faculty (see Tables 3.2 and 3.3). While the faculty rated "providing some form of education for any student regardless of his academic ability" as second on their list of current goals, it fell considerably further down the list among those emphasized by the presidents (fourteenth in rank). Faculty, however, would prefer that this goal receive less attention than it currently enjoys (moving it from second to seventh position among the preferred goals). It is, of course, the faculty that bears the brunt of the burden of attempting to accommodate the widely varying student needs presented by the open door college. Faculties are saying that they would like a little less heterogeneity with regard to student backgrounds and abilities and that this current policy needs some modification. The high degree of variance (standard deviation) in both of the present and preferred ratings by presidents suggests that there is considerable difference of opinion among presidents regarding their support for this particular goal. The lower the standard deviation the more confident we are that the rating given a particular goal statement does reflect the judgment of the total group involved.

The fact that this goal tends to be ranked lower by both groups under the preferred category than under the perceived or actual practice category, suggests that the open door concept has yet to be fully accepted. Additional comments in a later section of this chapter will reveal

TABLE 3.2--PRESIDENTS' RANKING OF GOALS *

	Present			Preferred		
	Rank	M	S.D.	Rank	M	S.D.
Serve higher education needs of youth from local community	1	1.39	0.68	2	1.27	0.60
Respond to needs of local community	4	1.81	0.84	6	1.37	0.63
Help students respect own ability and limitations	6	1.97	0.78	7	1.39	0.56
Help students adapt to new occupational requirements	9	2.13	0.93	9	1.41	0.65
Make financial assistance available to any student who wants to enroll in college	11	2.21	1.07	16	1.74	1.03
Ensure faculty participation in institutional decision making	12	2.22	0.85	19	1.90	0.77
Provide some form of education for any student regardless of academic ability	14	2.36	1.28	18	1.88	1.12
Ensure student participation in institutional decision making	18	2.59	0.92	21	2.18	0.87
Re-educate and retrain those whose vocational capabilites are obsolete	20	2.73	1.10	12	1.62	0.78
Attract representative number of minority faculty members	22	2.92	1.02	24	2.35	0.88
Help formulate programs in public policy areas, e.g.,pollution control	24	3.16	1.02	22	2.19	0.93
Allocate per cent of enrollment to minority groups or those of low socioeconomic status	25	3.72	1.33	25	3.31	1.36

* Because only 12 goal statements were administered to students and faculty, these same goals were selected from among the 26 rated by presidents for presentation here. Their rank among the 26 has been reported in order that their relative position can be compared with the rank order or relative position of the faculty and student goal statements, i.e., upper, middle, and lower third.

TABLE 3.3--FACULTY RANKING OF GOALS

	Present			Preferred		
	Rank	M	S.D.	Rank	M	S.D.
Serve higher education needs of youth from local community	1	1.66	0.82	2	1.44	0.67
Provide some form of education for any student regardless of academic ability	2	1.70	0.86	7	1.79	0.96
Respond to needs of local community	3	1.99	0.91	4	1.56	0.71
Help students adapt to new occupational requirements	4	2.12	0.93	3	1.47	0.64
Make financial assistance available to any student who wants to enroll in college	5	2.22	0.94	9	1.88	0.90
Help students respect own ability and limitations	6	2.24	0.94	1	1.40	0.60
Re-educate and retrain those whose vocational capabilities are obsolete	7	2.41	1.11	6	1.62	0.77
Ensure faculty participation in institutional decision making	8	2.58	1.04	5	1.61	0.73
Ensure student participation in institutional decision making	9	2.85	0.98	10	2.30	0.87
Attract representative number of minority faculty members	10	2.89	1.26	11	2.49	1.06
Help formulate programs in a number of public policy areas, e.g., pollution control	11	2.92	1.11	8	1.86	0.92
Allocate per cent of enrollment minority groups or those of low socioeconomic status	12	3.12	1.35	12	2.81	1.28

TABLE 3.4--STUDENT RANKING OF GOALS

	Present			Preferred		
	Rank	M	S.D.	Rank	M	S.D.
Serve higher education needs of youth from local community	1	2.18	1.04	3	1.77	0.88
Provide some form of education for any student regardless of academic ability	2	2.19	1.08	4	1.85	0.95
Make financial assistance available to any student who wants to enroll in college	3	2.23	1.04	1	1.73	0.90
Help students respect own ability and limitations	4	2.41	1.04	2	1.76	0.87
Help students adapt to new occupational requirements	5	2.58	1.06	5	1.38	0.87
Ensure faculty participation in institutional decision making	6	2.63	1.04	10	2.18	0.91
Re-educate and retrain those whose vocational capabilities are obsolete	7	2.67	1.14	7	1.95	0.91
Respond to needs of local community	8	2.68	1.10	9	2.10	0.94
Ensure student participation in institutional decision making	9	2.87	1.05	8	2.03	0.90
Allocate per cent of enrollment for minority groups or those of low socioeconomic status	10	2.88	1.14	11	2.36	1.07
Help formulate programs in a number of public policy areas, e.g., pollution control	11	2.95	1.14	6	1.91	0.95
Attract representative number of minority faculty members	12	3.33	1.10	12	2.44	1.02

some of the differences between institutions on the extent to which this goal is being implemented. Private junior colleges, for example, strive to be more selective than the public community colleges -- not always successfully, however.

The faculty, as might be expected, evidence less concern with the institutional climate or administrative goals. Their highest ranked "process" goal is focussed on the role of faculty in institutional decision making. They rate it as extremely or quite important. Contrasting this response to their perception of the importance of ensuring student participation in decision making points up one not unexpected difference that while faculty <u>are</u> committed to student development, they are not as fully supportive of providing students with an equal voice on matters of policy. Some critics might identify this apparent expression of paternalism as one of the fundamental reasons underlying the rise of student militancy. It should be pointed out, however, that faculty members do feel that this goal is currently being emphasized less than it should be as reflected in the mean score rating of 2.80 (with 1 being "emphasized very strongly" and 5, "emphasized not at all"). Students, incidentally, give this goal a slightly higher rating on future or preferred importance (2.20) and a slightly lower rating on present emphasis (2.88) than do the faculty (see Table 3.4).

Presidents, however, rank faculty involvement in the lower third of their priorities with present and preferred mean score ratings of 2.59

and 2.18, respectively. They tend to value the importance of "ensuring faculty participation" in decision making slightly more than "ensuring student participation," but again this goal item falls into the lower third in their ranking of "ought" or preferred goals. Present emphasis, however, brings it into the middle ranks (from a rank of 19 to a rank of 12) suggesting that they feel that too much emphasis is being given to this policy currently.

It is apparent from the pattern of responses that the faculty and students feel they are not sufficiently involved in decision making. Presidents, on the other hand, indicate that perhaps both groups are more involved than they should be. Recognizing the lower ranked status assigned by presidents to this goal, relative to the other goal items, in contrast with the responses of students and faculty, one is tempted to conclude that pressure from students and faculty for greater involvement in policy making has been counterbalanced by the reluctance of presidents to yield further on this issue. The apparent state of equilibrium, with students and faculty feeling they should have a little more representation and presidents feeling they should have a little less, may well represent the most expedient arrangement at this stage of development.

Presidents Set the Tone

The presidents' ranking and rating of 26 goals is presented in Table 3.5. Of the goals which rank among the top third, five are concerned with output goals and four with process goals. Note that all of the higher ranked perceived goals are also included among the higher ranked preferred goals, with one exception.

TABLE 3.5--PRESIDENTS' PERCEPTIONS OF GOALS FOR THE 70's
(N = 90)

Goal	Present Rank	Present Mean	Present S.D.	Preferred Rank	Preferred Mean	Preferred S.D.
Serve higher education needs of youth from local community	1	1.39	0.68	2	1.27	0.60
Encourage mutual trust and respect among faculty, students, and administrators	2	1.71	0.73	1	1.26	0.47
Establish and define institutional purposes	3	1.81	0.76	3	1.28	0.56
Repond to needs of local community	4	1.81	0.84	6	1.37	0.63
Make financial assistance available to any academically qualified student	5	1.84	0.85	8	1.40	0.63
Help students respect own abilities and limitations	6	1.97	0.78	7	1.39	0.56
Maintain an atmosphere of intellectual excitement on campus	7	2.04	0.90	4	1.35	0.60
Provide educational opportunities for adults in the local area	8	2.11	0.99	10	1.53	0.71
Help students adapt to new occupational requirements	9	2.13	0.93	9	1.41	0.65
Provide wide range of opportunities for specific occupational preparation	10	2.19	1.05	14	1.72	0.93
Make financial assistance available to any student who wants to enroll	11	2.21	1.07	16	1.74	1.03
Ensure faculty participation in institutional decision making	12	2.22	0.85	19	1.90	0.77
Provide for curricular and instructional evaluation	13	2.28	0.80	5	1.36	0.55

TABLE 6.5 continued

Goal	Present Rank	Present Mean	Present S.D.	Preferred Rank	Preferred Mean	Preferred S.D.
Provide some form of education for any student regardless of academic ability	14	2.36	1.28	18	1.88	1.12
Experiment with new forms of instruction	15	2.39	0.79	13	1.70	0.66
Increase number and diversity of sources of income	16	2.44	1.15	11	1.57	0.90
Encourage students to undertake self-directed study	17	2.57	1.00	15	1.72	0.75
Ensure student participation in institutional decision making	18	2.59	0.92	21	2.18	0.87
Develop programs for the special student, e.g., disadvantaged, bright, foreign	19	2.63	1.02	17	1.87	0.93
Re-educate and retrain those whose vocational capabilities are obsolete	20	2.73	1.10	12	1.62	0.78
Permit student wide latitude in course selection	21	2.85	0.92	20	2.15	0.90
Attract representative number of faculty members	22	2.92	1.02	24	2.35	0.88
Help solve social, economic or political problems in the immediate geographical area	23	3.09	0.95	23	2.32	1.03
Help formulate programs in a number of public policy areas, e.g., pollution control	24	3.16	1.02	22	2.19	0.93
Allocate per cent of enrollment for minority groups or those of low socioeconomic status	25	3.72	1.33	25	3.31	1.36
Strengthen religious faith of students	26	3.80	1.14	26	3.38	1.32

The one exception is the concern with providing for curricular and instructional evaluation, fifth among the preferred goals but thirteenth in terms of current emphasis. Presidents recognize that there is considerable room for improvement in this area.

The fact that the majority of top ranked goals in both the present and preferred categories focus on serving the needs of students contrasts with the findings of Gross and Grambsch [26] when they ranked the goal perceptions of approximately 15,000 university administrators and faculty members in 1964. Only one of the seven top ranked goals of universities was concerned in any way with students, and "that one -- the output goal of training students for research and scholarship -- is closely associated with the scholarly interest of professors and with the emphasis given to pure research" [26, p. 30]. Universities, at least in 1964, gave scant attention to the interest of students in contrast with the number of high ranking student oriented goals emphasized by the community and junior college presidents. This is a very significant difference.

Among the presidents' five lowest ranked goal items in both the present and preferred dimensions are the following two statements: (1) Helping to formulate programs in a number of public policy areas and (2) Attempting to solve the economic, political, and social needs of the surrounding community. "Attracting a representative number of minority faculty members" and "allocating" a percentage of the enrollment for minority groups" draws little support from presidents, also. That these goal items represent areas of considerable controversy is demonstrated by the variability of responses. Three out of the four mean scores (in terms of present emphasis) fell above a standard deviation of 1.0 making it difficult to judge just what normative score to assign to these goal items. "Setting aside a per centage of the enrollment for minority or low socioeconomic

groups" may very well be perceived as running counter to state statutes or federal regulations. These ambivalent attitudes on this item might very well occur because of the ambiguity of the statement (even though it had been carefully pretested before inclusion in the survey instrument). Those who are strongly committed to a policy of open enrollment might understandably interpret this particular goal statement as ultimately leading to enrollment constraints which would militate against equal access for all students regardless of race, creed, or color. The variability of responses does demonstrate the diversity of views associated with this goal statement.

"Formulating programs in the public interest" and "attempting to solve social or economic problems in the immediate geographic area," while they ranked low among the present and preferred goals of presidents, do not represent the same degree of controversy that minority group enrollments or minority representation on the faculty represent.[3] While there have been pressures from community groups on their local community colleges to respond to such needs, it is apparent that the presidents do not feel that such concerns are to be given top priority.[4] Note the degree of

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3. In order to assess the contrasting views of chief executives from public and private institutions on these and other policy issues, see page 72 and Appendix C.

4. Presidents of public community colleges do give a high ranking to the goal statements "to be responsive to the needs of the local community" and "to serve the higher education needs of youth from the surrounding community" (first and second rank in both the "preferred" and the "present" categories), but both statements tend to reflect the more conventional commitments of their institutions. Adult education also falls among the top third of their priorities. Obviously, these community needs are being responded to, possibly because they represent the more accepted "bread and butter" services that a community college is expected to provide, and possibly because there is a greater expressed need in these areas on the part of the community.

congruence between the present and the preferred ratings. Community representatives, perhaps, need to generate stronger pressures for social and economic reform programs if they expect to bring attention to these issues during the coming decade.

Two goal items stand out as over- or under-emphasized. The first, "ensuring faculty participation in institutional decision making," moves from a relatively high rank under the perceived column to a considerably lower ranked position in the preferred column (twelfth to nineteenth). As we have already observed, presidents seem to feel that faculty groups have been given too much power in this area and such power might better be shared with other concerned groups such as trustees or students. The second goal item upon which presidents feel there ought to be a good deal more emphasis, is the concern with "re-educating and retraining of those whose vocational capabilities are obsolete." This item is ranked twelfth among the preferred goals but falls to the twentieth rank in terms of present emphasis. The high variance in perceptions on how much emphasis is currently being given this goal is attributable to the presidents of private junior colleges who are not at all sure that this is a practice which their institutions ought to be emphasizing. Removing the 20 private junior college presidents from the sample reduces the variance on the perceived goal from 1.10 to .92 (see Appendix C for a comparison of public and private junior college presidential views on these statements). When private junior college presidents' views are excluded, this goal statement rises to the upper 1/3 rank of goals supported by the public community college presidents.

The high variance on the lowest present and perceived goal dimension, "strengthening the religious faith of students," reflects the difference in perspective of the few presidents who preside over reli-

giously affiliated junior colleges. Removal of this sub-group of presidents from the total distribution reduces the variance considerably. For those representing public community colleges or independent junior colleges it is clearly a goal which is no longer felt to be of much relevance to postsecondary education.

Public and Private Junior Colleges: A Contrast

By comparing the perceptions of presidents in public and private junior colleges, we find that the private junior college presidents place greater stress on the intellectual, psychological, and moral development of the student while public community college presidents are more concerned with career education, adult education, and responding to the needs of the local community. Paralleling these findings, the rank order assigned to the present and preferred output goals revealed that the goals of "helping students respect their own abilities and limitations" and "maintaining an atmosphere of intellectual excitement" fall into the top third of the private junior college presidents' higher ranked goals while they occupy positions in the middle ranks for public community college presidents. "Encouraging students to undertake self-directed study," while ranked among the middle third by private junior college presidents, is still ranked significantly higher by them than by their counterparts in the public two-year institutions. This concern with developing the student's objectivity and inculcating a desire to study independently parallels the more traditional commitments of the private four-year colleges and universities.

Private junior college presidents are also much more concerned with "increasing the number and diversity of sources of income," "clearly defining institutional purposes," and "encouraging mutual trust and

respect among faculty, students, and administrators." Public community college presidents, on the other hand, tend to value egalitarian goals such as "making financial assistance available to any student who wants to enroll in college," "providing some form of education for any student regardless of his academic ability," and "helping students adapt to new occupational requirements." While this is not meant to imply that private junior colleges are any less student oriented than their colleagues in the public domain, it does point up the fact that the presidents of these institutions are less likely to be concerned with opening their doors to all applicants, regardless of their qualifications.

These findings, when compared with those of the Gross and Grambesch study, reveal several interesting parallels between private and public universities, and private and junior and public community colleges:

> Private institutions concern themselves with cultivating the student's intellect...developing his objectivity about himself and his beliefs. In public universities, on the other hand, no student-expressive goals received particular emphasis. With respect to student-instrumental goals, private universities stress providing students with skills, attitudes, contracts, and experiences which maximize the likelihood of their achieving high status... whereas public universities stress preparing students for useful careers... State universities give priority to carrying on applied research, assisting citizens through extension programs and similar services, and providing cultural leadership to the community through programs in the arts, public lectures, exhibits, and so forth... Private universities are more interested in students of high potential whereas public universities concern themselves with educating all high school graduates who meet the legal requirements for admission. Moreover, the public universities emphasize satisfying the needs and solving the problems of the immediate geographical region -- a goal closely connected to the direct service goal of providing extension services -- and keeping costs as low as possible... [26, pp 47-48]

They attribute the elitist orientation of the private institutions to the influence that deans and faculty have on decision making in contrast with state universities and public colleges where outside groups such as the state legislature and boards of regents exercise a relatively higher

degree of decision-making authority.

Selectivity and a concern with developing the students' intellectual capacities on the part of private junior colleges may, during this period of rampant egalitarianism, serve to fill an important void which has emerged in higher education. Rather than slavishly patterning themselves after four-year colleges or public community colleges, the private junior colleges might well turn adversity into opportunity. Selectivity, while conventionally associated with screening out the low ability student (as measured by culturally biased standarized achievement tests), might better by exercized along other lines, such as selecting students whose learning habits make them potentially more responsive to other than the traditional verbal mode of instruction. Disadvantaged students, students with poorly developed communication skills, students who speak two or more languages, all are candidates for learning programs tailored to their particular learning styles. While many public institutions of higher education, both two-and four-year, emphasize community service and comprehensive educational programs, private junior colleges with their relatively higher degree of autonomy and self-directedness, could strengthen their competitive position vis-a-vis other institutions if they aggressively pursued the special student by demonstrating their superior ability to meet their needs. Such an option or alternative might serve as a deterrent to the present trend of public community colleges toward what the Newman report describes as the tendency to transform "community institutions into amorphous, bland, increasingly large, increasingly state dominate, two-year institutions which serve a number of interests other than that of students" [41,p.74]. A wide range of program offerings by public two-year institutions has not lessened the appeal of proprietary

vocational schools who make it their business to offer up-to-date and effective occupational training. For reasons already noted, private junior colleges might well pursue a parallel strategy, zeroing in on special categories of students by offering them learning systems tailored to their needs.

To achieve such an objective will require a new awareness on the part of junior college presidents in contrast with the one currently reflected in their responses to certain goal statements provided by our study. "Developing programs for the special student (e.g., disadvantaged, bright, foreign)" fell well down the list of priorities for both public and private institutions (eighteenth in rank in the preferred category). "Experimenting with new forms of instruction fared a little better in private junior colleges (eighth in the preferred category) than it did in the public community colleges (fifteenth), indicating a slightly stronger orientation in this direction on the part of private institutions. Most private institutions do not see themselves competing with public or even proprietary vocational schools as evidenced by the low ranking assigned to the goal of "providing a wide range of opportunities for specific occupational preparation" (twenty-first on the preferred scale as contrasted with twelfth on the public institution presidents' ranking). An attempt to move in the direction of alternative offerings will require a different ordering of priorities than that which presently prevails.

Faculty groups at public and private two-year institutions on the whole evidence greater agreement in their views of what ought to be and what are the goals of their institutions than do presidents. Appendix C presents the detailed breakdown of their responses to the 12 goal statements. Both institutional groups strongly endorse, for example, "helping

students to develop a respect for their own abilities and limitations" (although there is some indication that public community college faculty members feel that this goal is honored more in the breach than in the practice). Both groups give stronger backing to the need for "formulating programs in a number of public policy areas such as pollution control and urban renewal" than do presidents; however, both faculty groups see a gap between what "ought to be" and what "is" the current practice. And both groups feel that their institutions are putting too much emphasis on admitting all applicants regardless of their academic abilities.

There are a few interesting differences between faculties at public and private institutions, differences which follow the same pattern of egalitarian-elitist orientation discussed earlier. "Faculty involvement in decision making" gets a higher ranking on both the preferred and present practice dimensions by the faculties of private junior colleges (second and fourth respectively) than by those at the public community colleges (sixth and eighth). There is a slight tendency for more faculty in the public institutions than in the private institutions to give greater weight to "responding to the needs of the local community" and "re-educating and retraining those whose vocational capabilities are obsolete." One exception to these otherwise consistent findings is in the area of "making financial assistance available to any student who wants to enroll in college." Private junior college faculty members rank it sixth among their preferred goals while public college faculty members rank it ninth. Both groups rank this statement fifth in terms of present emphasis. One explanation for this apparent discrepancy may lie in the observation that private institutions exercise greater control over the types of financial support available to them and are therefore able to put this

policy into practice more readily than public institutions.[5] Not all faculty members at the private institutions concur in this judgment, as evidenced by the high variance in opinions reported for the "preferred" and "present" response categories. Such a priority may well represent the "goal" of a few private institutions but should not be described as one of the major "purposes" of private junior colleges collectively (see footnote 2, pg. 58, for a fuller definition of these two terms).

Student Perceptions

An additional and important segment of the community and junior college scene not yet reported in our analysis concerns the perceptions of students. The junior college student marches to a different drummer than presidents or faculty.

The rash of protests by four-year college students in the past few years has tended to overshadow the relative calm experienced on many community and junior college campuses. While a number of observers have attributed this to the higher level of maturity of the junior college student, his strong commitment to preparation for a career, and his off-campus residency, part of the credit can also be attributed to the interest shown by faculty in students. Not only is this orientation manifested in the goal priorities already reported for faculty members and presidents, but to a significant extent it is confirmed in the views and opinions of the students.

Table 3.4 establishes the congruency among the top-rated preferred

5. Reference to the chapter on student characteristics will reveal that proportionally higher numbers of students attending private junior colleges come from low income families.

goals responded to by each of our three constituent groups. "Helping students respect their own abilities and limitations," "serving the higher education needs of youth from the local communities," and "helping students adapt to new occupational requirements" represent goals which are ranked among the top concerns of full-time students enrolled at the time of the survey. However, two hitherto neglected goal dimensions, "making financial assistance available to any student who wants to enroll in college" and"providing some form of education for any student regardless of his academic ability," are both given a much higher ranking by students than by either faculty or presidents. These findings tend to support the observation made earlier that the younger generation is more egalitarian in its outlook than "establishment" representatives and supports those policies and practices which facilitate that purpose.

Two goals which received particular attention -- one because of its over-emphasis by the institutions involved in the survey and the other because of its under-emphasis -- reflect the growing concern on the part of students with the internal power structure and the community orientation of their institutions. Students rank as sixth on their list of preferred goals the "formulation of public policy programs in such areas as pollution control, urban renewal, and health care." However, when ranked in terms of the current emphasis that community colleges are giving to this area of concern, it falls almost at the bottom of their list. "Ensuring faculty participation in decision making" suffers a reverse priority. Students ranked it tenth on their list of preferred goals and in sixth position in terms of current emphasis by their institutions. The implications of this latter practice have already been discussed. The former concern suggests that the formulation of public policy programs needs to be given more attention by both faculty and presidents.

It is worth noting that the degree of emphasis, as measured by the similarity of the mean scores on a 5-point scale, is quite comparable from one group to the other; only the rank order of this goal statement differs significantly.

The low rank accorded the two goal statements concerned with minorities were, at first blush, surprising. Since the majority of students are White, however, these concerns may not occupy the attention of interest of this sizable segment of the student population to the extent that they would minority groups. Unfortunately, our limited budget did not permit extensive cross tabulations with controls on minority group status. Consequently, such a conjecture must await additional analysis beyond that intended (or budgeted for) by this study.

A second interpretation may reside in the ambiguity of the wording of these two goal statements, particularly the one dealing with the setting aside of quotas to enhance the potential enrollment of minority groups. As has been pointed out, if such a policy were carried to its logical conclusion, it would clearly contradict the larger commitment of community colleges to the policy of equal access of any student, regardless of his academic ability or background, to a postsecondary education. The attraction of faculty members who are also identified with minority groups to be served in the community might be interpreted by some students as creating a climate whereby faculty selection standards would be compromised in order to accommodate these demands. In any event, the response of students to these two goal statements puts them squarely on record as endorsing the same low-priority status for these items as do the president and faculty groups.

CHAPTER 4

BARRIERS TO CHANGE

This chapter is directed at those who set policies and are responsible for carrying out these policies. It will provide a framework for examining goals and aligning those goals with current practices. On-going programs and practices will be examined in greater detail in light of the goal priorities discussed in the previous chapter. Where information gaps exist, and the need for further studies is evident, such needs will be identified.

The extent to which the high priority "output" and "process" goals are being implemented by the nation's community and junior colleges will be evaluated in two ways: First, the barriers and constraints confronting those who wish to improve upon current practices will be analysed, and second, promising strategies and practices will be identified as a means of alerting administrators and key policy makers to the potentialities (and limitations) of these procedures.

This form of analysis can be described as a systems analytic or problem solving approach. Diagnosing the problem, formulating objectives and effectiveness criteria, identifying constraints and needed resources, selecting potential solutions, evaluating these alternatives, and putting into practice the selected alternative within the system describes the essential steps through which this type of analysis must proceed. A systems approach forces the problem solver to think through logically the steps to be followed as he attempts to convert promise into practice.

The Role of Community Junior Colleges

As we observed in the previous chapter, there is a growing consensus among administrators, faculty, and students on the roll of the comprehensive postsecondary community and junior college program.

a. University parallel -- a full range of academic offerings should be provided paralleling the lower division undergraduate programs at four-year colleges. Such courses should be fully transferable on completion of an associate arts degree and should be equal in every way to college courses at other institutions.

b. General education -- all enrollees should be offered the opportunity to obtain a broad general education, equivalent to the traditional concept of a liberal education. One major benefit would be the development of learning skills and independent study habits that would aid the student beyond his formal years of education. The basic and intermediate level arts, humanities, and sciences should be studied with the intent of developing a full range of intellectual skills.

c. Career education -- occupational training or career education programs should be offered which match the industrial and business needs of the community. Cooperative education programs, work/study programs, and intensive career counseling should acquaint qualified students with the skills needed to enter and advance in their chosen careers.

d. Non-traditional studies -- the open door concept should insure that a wide variety of students with differing interests, motivations, and abilities will be served. Most two-year institutions limit entrance qualifications to a high school diploma or equivalent, and, for the most part, they require little or no tuition. Coordinate with the concept of openness is the expectation that the faculty will be able to serve the individual needs of students

as well as help them meet the requirements of a particular course of study. The provision of developmental education programs should serve those who are in need of remedial help. Core programs concentrated on strengthening the learning abilities of those seriously handicapped by their previous experiences and background should be a natural outgrowth of any attention given to this "process" goal.

e. Community involvement -- the lifelong education and community service function of the community college should clearly be geared to the special requirements and concerns of the community. Most junior colleges recognize this requirement by providing college-level courses during evening hours, cooperative programs with industry for career upgrading, special programs for low income groups, and special noncredit courses appealing to avocational or cultural interests.

f. Career counseling -- cutting across all of the previously mentioned goals is the need for a continuous program of career counseling. Viewed as an intrinsic part of the total program, the counseling and guidance function is expected to serve the student from pre-registration through graduation or beyond. The guidance counselor utilizes a range of test data, interests inventories, and background information as well as personal contacts with the student to guide the student toward career decisions.

The experience of the full-time student at a community or junior college should be such that it opens up several appealing options for him when he completes his program of study. As we have already established, these postsecondary institutions have their historical roots in an eclectic heritage of the academic and the vocational. While some compete with area vocational schools and proprietary schools run for profit, the idea of an open door comprehensive program has a strong appeal. As smoothly functioning organizations, however, many of these institutions have not yet

successfully merged their mixed heritage.

One example of the disparity between what is and what ought to be may be found in the attitude of those faculty who are predisposed to favor the college transfer programs. Such faculty members often evidence negative attitudes toward occupational courses. They have been reared in the tradition of the liberal arts and the organization of academic departments typically follows traditional disciplinary lines. As a result, in many institutions occupational training programs occupy a position of lesser prestige among the majority of the faculty. Too frequently this attitude is communicated to and adopted by the majority of students.

Perhaps the most glaring gap between goal and practice is in the area of general education. Little emphasis is placed on inter-disciplinary studies and limited effort is made to develop a broad set of problem solving skills through integration of disciplines for the purpose of tackling emergent social problems such as pollution control and community wide health services. A restructuring of departmencs along inter-disciplinary lines, particularly in the academic areas such as the humanities and social sciences, is overdue.

Most community and junior colleges invest extensive resources in the counseling and guidance function. Yet several studies indicate that students derive little benefit from the present form of counseling. Furthermore, guidance counselors are often unaware of the coping skills and job entry skills required by those who will terminate before or at the end of two years. The career interests of part-time students are given little or no attention.

Community services and the adult education program often operate in an ancillary fashion. There is meager financial support for such efforts

(most evening instructors are paid on an hourly basis and do not have tenure), and resources for community service programs are often linked or are the first to be cut back in a budget crunch. Until recently, such programs had little relevance to community needs or interests. In fact, meeting community needs often meant responding to the special interests of middle class business and professional groups without recognition of the concerns of other segments of the community.

As for serving the wide-ranging needs of a diverse student population, community colleges are improving but much remains to be done. Most institutional procedures and curriculum content are too often geared to the above-average student. Little provision is made for differentiating between the verbal and non-verbal aptitudes, between the self-starters and other-directed students, between the over-achievers and the under-achievers. The high attrition rates still persist, particularly among those from educationally disadvantaged backgrounds.

While societal conditions establish a clear mandate for change, many of those who occupy key roles are grouping for better ways to operate. The solution will not be found by changing the organization structure of an institution or by appointing new investigative committees. Basic changes dealing with the total structure, not just a single facet or sub-system, are required. A coordinated, systematic approach to educational reform is needed to resolve many of the existing problems. The remainder of this chapter will be concerned with exploring in greater depth four goal areas in need of further improvement: (A) Lifelong Education, (B) Community Service, (C) Career Education, and (D) Compensatory Education. Singling out these areas for comment is not meant to imply that the other major purposes served by community and junior colleges are any the less note-

worthy. The college parallel program to all reports continues to be an effective alternative for students who want a college education but for a variety of reasons -- cost, proximity, scholastic record -- elect to take advantage of the neighborhood community college. Student personnel services warrants more space than we have allotted to it in this brief overview of current practices. The reader is referred, however, to a recent Esso Foundation-supported five-year follow-up of the Carnegie Corporation-sponsored appraisal of junior college student personnel programs for a current, in-depth appraisal [38]. Other process or support systems have been ignored also, for reasons of brevity. We can only hope that they will receive their proper emphasis in subsequent studies.

Strategies for Change

Before exploring alternative ways of strengthening our postsecondary institutions, those charged with the responsibility for implementing needed reforms will want to consider bringing systems analytic methods into play. A systems approach provides a more rigorous way of asking and answering questions; it attempts to prescribe what action is to be taken (and the expected results of that action) against a backdrop of antecedent conditions, social values, and developmental trends.

In a recent book, A Guide To Innovation in Education, [29], some 44 change strategies employed by experienced educational change agents were cataloged and rated in terms of their potential use at a given stage in a change program. Most of these strategies tended to focus on the individual as the focus of power and ignored the significance of the organization. Past practices, traditional role functions, vested interests represent a few of the barriers in the institutional setting with which the aspiring

change strategist must cope. An organization shapes and molds the individual in it as much or more than those in the organization shape and mold it. Thus a comprehensive change strategy must be as ready to cope with organizational "inertia" as it is with the defenses of individuals in the organization. The interdependence of the organization and the role incumbent is dramatically revealed whenever that relationship is thrown into disequilibrium. A comprehensive strategy must grapple successfully with both.

Six steps involving a systematic approach to problem resolution can be outlined as follows:

Step 1: Diagnosing the Problem A successful problem solving strategy begins with the recognition that a problem exists. While this may seem self-evident, many well-meaning problem solving groups fail because those responsible for giving it direction are not sure which underlying causes or variables should be tackled first. To use a familiar example, the high dropout rate among inner-city Black students may not be simply a matter of their inability to handle a verbally oriented (in terms of reading and communications skills) curriculum, but may very well reflect a sense of alienation stemming from their constant bombardment with the White, middle-class values of faculty members.

Closely tied to the problem of diagnosis is the need to pinpoint just who are the groups that should or can be expected to articulate the problem. Who are the opinion molders and leaders? What are their gripes and perceptions? Simply accepting their interpretation of the problem, however, would be akin to the medical practitioner who accepts uncritically the patient's self-diagnosis of an illness. An ad hoc committee must tap the right source for the initial input of information, but then interpret that information in light of current theory.

Step 2: Formulating Objectives Having identified or separated the real from the imagined problem and having assessed the concerns of key groups, a search for alternative solutions can now begin. The members of a problem solving team must first decide what it is they are trying to achieve, what are their objectives? An objective may be the end of an action or an intermediate step directed toward a more distant goal. Well-stated curriculum objectives, for example, should (1) describe in operational or behavioral terms the type of behavior desired, (2) state the criteria of acceptable performance, (3) be consistent with longer termed goals and (4) specify the conditions under which the desired behavior is to be performed. The members of the group must be convinced that the objective of their collective effort is worth serving. Full commitment will help to ensure a successful outcome.

Step 3: Identifying Constraints and Needed Resources Before outlining any strategy for change, the problem solving group should make themselves fully aware of the history and traditions which surround a given problem. Constraints and barriers must be identified. State regulations, faculty attitudes, routine or traditional practices represent some of the more familiar barriers to be looked at and analyzed.

The resources required to implement alternative strategies need to be detailed. Such resources may take the form of needed information, people with given talents, new instructional procedures, and money.

Step 4: Selecting Potential Solutions Having successfully analyzed the underlying concerns, identified relevant groups to be involved, established specific objectives, and pinpointed possible barriers and needed resources, the group is ready to retrieve and evaluate alternative solutions for solving the problem at hand. Two important procedures need to be implemented to carry out this step: (1) Reviewing appropriate information sources and (2) choosing from among an array of promising alternatives the best solution for further analysis. A systematic review of the monthly publication Research in Education, or utilization of the ERIC Clearinghouse for Junior Colleges, for example, makes the task of locating current or relevant alternative solutions to problems far easier than it would have been a decade ago. Visits to innovative institutions, reviewing evaluative reports, scanning journals and monographs, represent other typical search procedures.

One caveat to be observed: be wary of the blandishments of outside experts. Such resource people should be able to grapple with and understand the problem in its natural context. Frequently a university-based consultant fails to appreciate the time-constraints under which school administrators are required to operate. He is often more concerned with generalizing from specific situations. Practitioners are often disposed to rejecting solutions proposed by "ivory tower" consultants because their recommendations are phrased in ways that are not easily understood and put to work. Even non-university based researchers, in their concern with advancing knowledge (and their own reputation in their chosen field), tend to delay practical decisions in the interest of accuracy and truth. Task force committees will, in all probability, want to operate within a specific framework or problem definition, having in mind specific outputs within a limited time frame. Effective linkage between such a group and outside resource people requires mutual understanding, equal status, and frequent interaction.

Step 5: Evaluating Alternatives Selecting one or more alternatives from among an array of possible lines of action necessarily requires the establishment of criteria for evaluative purposes. Hopefully, such criteria were agreed upon at the time the attempt at problem solving got underway. However, it is still not too late to do so. Feasibility, workability, and effectiveness describe three of the more common criteria to be employed. Feasibility establishes the likelihood that a given alternative can, in fact, be achieved keeping in mind the constraints and needed resources available to the group. Workability reflects the extent to which the potential solution really works. How reliable is the proposed procedure? Have the detailed steps to be followed been worked out? What costs are likely to be incurred and can these be met? Incidentally, on this last question, there is a tendency for those who hold the pursestrings to impose this

selection criteria as a constant while letting alternative strategies vary. It may be just as important until the other assessments have been made. Effectiveness is often the most difficult criteria to employ because of the time lag between a particular demonstration and the expected results. For this reason, judging the effectiveness of one strategy against another may have to be carried out on a subjective basis. Successfully predicting outcome often requires trained specialists.

A final decision will most likely be based upon a ranking of alternatives by assigning weights to each of these three criteria and then selecting the option that stands out as the most desirable.

Step 6: Implementing the Selected Alternative Having settled upon a potential solution, those responsible for selecting an alternative solution must now turn over the recommended procedure or strategy to those implementing the recommendation. Effective follow-up requires, among other things, early involvement of those who are expected to implement that procedure, e.g., faculty members. This, in turn, requires clear and precise objectives, systematic steps to be followed, and the specification of evaluative criteria; in other words the same steps through which any systematic problem resolution must proceed. This iterative cycle must continue until the new program is well established.

To insure continued acceptance of a new innovative program or procedure, a supportive climate for the project must be maintained. Those responsible must have a sense of confidence and competence, openness to new information, and a willingness to take risks. Anticipated rewards are also an essential ingredient. Visibility as an innovator may be sufficient reward for some. Others will want to see the new program benefiting students. Often times the faculty derive little satisfaction from their attempts to help students improve their performance because of the time lag involved in being able to collect evidence of behavioral change. Frequent measures of interim progress toward a longer term goal may serve as needed feedback benefiting both students and faculty. /11/

What has been described offers a more systematic plan for implementing needed changes within operating junior college districts. Any administrator who considers adopting this planned approach to school renewal may wonder if this is something he has to do on top of his present activities. Rather than superimposing this procedure upon already established mechanisms for change, we are suggesting it as an alternative approach. It does require changes in attitudes and in behavior, but hopefully offers its own rewards. It represents a better way of merging rational planning with an active concern for people, and that, of course is what educational administration is all about.

Goal Priorities Re-examined

The discussion that follows flows out of many comments and observations which the staff of Project Focus gathered together during their in-depth interviews with 1,500 or more students, faculty, administrators, board members, community leaders, and state personnel located in 30 community and junior colleges in 20 states. Interview findings will be buttressed by the survey data where possible. The four areas of concern, lifelong education, community service, career education, and compensatory education are closely related to the top-ranked goals of community and junior colleges. Each will be examined systematically along the lines just discussed. The reader is encouraged to review what is presented here in light of his own situation and to draw whatever conclusions are relevant. It is our hope that corrective action, where needed, will be initiated by this review.

A. Lifelong Education

Among the more important functions of public community colleges[1] has been adult and continuing education for those in the local community. Five major services have been involved: (1) Occupational training, including field training, occupational upgrading, and pre-employment education. (2) Avocational and cultural education providing instruction in leisure-time activities encompassing a wide variety of avocational interests from navigation procedures to the great books. (3) Adult basic education including programs for persons with less than the equivalent of an eighth grade education, usually linked with pre-employment training. (4) Adult civic education designed to prepare aliens for U. S. citizenship, sometimes including high school equivalency education. (5) Workshops, seminars, and

1. The majority of private junior colleges have not traditionally viewed this activity as one of their major missions.

non-credit courses designed to meet the special needs of the community. Adult education at the community college level does and should play an essential role in helping adults adjust to increased leisure, changing technological requirements in the work place, and community requirements. Describing such purposes does not ensure that they are being effectively served, however. A look at our survey findings reinforces this observation.

Presidents of the 90 institutions comprising our sample were asked to assign, under three different budget statuses (stringent, unchanged, and ample), a high, medium, or low priority to a number of college activities (see Appendix D, Exhibit V). The degree of support for three types of adult programs changes dramatically as the three budget conditions are allowed to vary. Assuming that financial resources were to remain the same over the decade, 51 per cent of the presidents responding rated adult evening courses as a high priority. Under more constrained financial circumstances, however, only 31 per cent did so. Non-credit courses and workshops and seminars received middle priority ratings should the financial status of the organization stay the same over the decade and slipped dramatically to a low priority status if financial resources were cut back.

A parallel conclusion can be drawn from examining the ranking of two adult education goal items ("providing education opportunities for adults in the local area" and "re-educate and retrain those whose vocational skills are in danger of becoming obsolete"). Both goals are ranked by presidents of public community colleges in the upper third on the preferred dimension. The relatively high rank for the retraining goal on the preferred dimension contrasts with its much lower rank in terms of present emphasis (a shift from eighth to sixteenth position). The adult education goal item evidences a slight reversal in rank with presidents giving it a rank of 8 on the

preferred list and a rank of 5 in terms of their perception of present emphasis. (See Appendix C).

Tables 3.3 and 3.4 in Chapter 3 could be interpreted as a downgrading of the adult education function by students and faculty. However, when one considers that the respondents to the survey questionnaire were limited to full-time students and faculty, then this apparent contradiction becomes more understandable. The needs of part-time students were strongly voiced in many of the interviews which staff members conducted. Since most of these students are older, there was a decided difference between the day and evening student both in the expression of need and in the level of commitment to learning. Adult students were less content with mediocre instructors and more insistent that their individual learning needs be served effectively. They endorsed a free and open exchange between student and instructor and sought out teachers who knew what they were talking about.

A similar situation exists for the part-time faculty in that no participated in the completion of the survey questionnaire. Those interviewed, however, strongly endorsed the need for adult education. Those who taught in the adult evening or extended day program most were recruited directly from the community and were well acquainted with its needs. As would be expected, fewer of the part-time faculty had graduate degrees and most had extensive experience in other than faculty roles.

Again the recent report of Bureau of Social Science Research [24] sheds much needed light on the characteristic and interest of both part-time faculty and students enrolled in public community colleges. The students were on the average six to seven years older than full-time day students. Almost half (47 per cent) were female and twice as many as the full-time day students came from the ranks of minorities. The vast

majority were married and were carrying full-time jobs. Part-time students reported considerably higher living costs than the full-time students and tended to be more critical of the type of instruction that they received.

Differences between part-time and full-time faculty members occurred in only a few respects. "In general, the two-year college faculty population was predominantly White and male, with men outnumbering women in both full-time and part-time teaching positions.... The two-year college faculty were also predominantly middle class, with over half /coming from homes in which/ the fathers /were/ in 'white collar' occupations" /24 pg. 195/. Twice as many part-time faculty came from family backgrounds where the father was classified as a "service worker."

Barriers and Constraints

Adult education, unlike othe[illegible]r sectors of public education, has suffered from a proliferation of overlapping institutional support. Extension services of universities, high school-based adult education programs, proprietary schools offering a wide variety of vocational and technical education, correspondence schools, as well as community colleges all offer a varied program for the part-time adult student. Short courses offered either in the evening or on a release time basis, residential programs of a few day's or week's duration, seminars, and coordinated classroom and on-the-job training represent some of the variety of learning experiences now available. Usually such programs are financed by means of fees or tuition charged directly to the student.

The concept of free continuing education has not yet penetrated the adult education field to any appreciable extent. The fragmented support base and the pay-as-you-go approach tend to limit the amount of federal and state funds flowing into this sector of education. A coordinated

lobbying effort by diverse groups of institutional representatives, often with competing interests, has yet to be formed.[2] The result has been limited dollar resources for planning and developmental purposes.

A second constraint on the more rapid expansion of this area of education has been the peripheral status of such programs within those public institutions where they are lodged. Universities, for example, until recently, assigned to continuing education a low status within the departmental hierarchy. Those associated with adult education at the university have traditionally lacked power and influence. While there is some evidence that the status is changing, there has been no dramatic upsurge in the attention given to this relatively nonprestigious sector of higher education.

As we observed in the earlier discussion of the status of the extended day program within community colleges, it is a precarious existence. When faced with the necessity of budget cutbacks, presidents of the public community colleges often discover that the only major budgetary item amenable to reduction is the extended day program. Many of the faculty employed in the continuing education program are non-tenured making this one of the more vulnerable budget areas when faced with a budget squeeze. Further evidence of the marginal status of continuing education can be provided by examining state budgets. Only a few states provide separate funds for this purpose. Some monies come from federal appropriations primarily in the adult basic education area. Duplication and overlapping authorities conspire

2. There is some hope that this limitation will be overcome by the recent formation of the Adult Education Action Council, purposely organized to represent the interest of all groups concerned with strengthening federal support for adult education.

to dilute the impact of these fragmented programs and detract from their potential appeal to a sizeable segment of the adult population.

A third compounding factor in the development of widespread support for continuing education has been the lack of career ladders or advancement opportunities. Few universities view this area as a top priority. Adult education deans often discover that they have reached the ceiling of their career and that there are very few job slots at higher levels.

A fourth factor, reflecting to some extent the low financial status of this field, is the lack of a well-conceived research and development program aimed at furthering our knowledge of the adult learning process. This lack of attention to the particular requirements of adults is highlighted by the tendency of many faculty members to provide the same type of curriculum and instructional procedures that they employ with younger students. This "warmed over" curriculum and pedagogy frequently creates dissatisfaction on the part of enrolled adults who expected something different.

Future Implications

The necessity for re-deploying portions of our labor force from one occupation to another, the continuing effort to improve the socioeconomic status of the di-advantaged segments of our society, and anticipated increases in leisure time have combined to create an unprecedented demand for a wide variety of adult and continuing education opportunities. Many of these are outside the traditional educational program. We must look for improved ways of providing "non-traditional" learning opportunities to meet this increasing demand. It has been estimated that more than 82 million adult Americans will be involved in education programs outside the mainstream of education by 1975. Such a figure represents a threefold increase

in the estimated number of adults participating in some form of adult education in 1965. The search for ways of meeting this anticipated rise in demand has provoked a flurry of innovations ranging from "colleges without walls" to external degrees and equivalency examinations.

Medsker and Tillery sum up the current status of adult education when they state that

> continuing education has a rather shallow meaning if the programs for transfer and occupational students alike do not stimulate interest in lifelong development and provide the learning techniques to make it possible. Where there is much rhetoric about lifelong education and the relevance of the community college curriculum, most continuing education programs rely heavily on traditional introductory courses or on what many teachers consider to be 'watered down' versions of 'college level' courses. There is much yet to be done in bringing the promise of lifelong learning into reality [40,p.72]

B. Community Services

Just as we have described a growing interest in adult evening and part-time education programs, so, too, has there been a rise in the use of the community college as a conference center, as a place for community-oriented workshops, and as a meeting place for community organizations. The number of community-based advisory groups, many representing the special interests of local employers, minority groups, older age groups, etc., is expanding. The types and variety of services are almost as varied as the clientele to be served.

The response of community colleges to these multiple interests has been uneven. Prototype systems are beginning to emerge, however, which will serve as models for the future. A survey [55] of 100 randomly selected community colleges throughout the nation identified a basic set of programs that had been established at most institutions. This core effort included adult evening education programs and extension centers,

the offering of non-credit courses and conferences and workshops to meet the needs of local citizens, a broadened spectrum of advisory groups, the use of college facilities by community organizations, the establishment of a full-time community service department within the college, and professional development of faculty and staff members involved in this aspect of the community college effort. This spectrum of community oriented programs, rooted in past adult and continuing education services, should expand as community representatives become more articulate in their demand for such services.

Barriers and Constraints

Too often an initial commitment to community needs has been short-lived because the responsibility for the effort was lodged in one division in the community college. The marginal status of such a program has already been outlined in our discussion of the concern with adult and continuing education. A meaningful commitment on the part of community colleges to serve a wide spectrum of community needs requires the involvement of faculty, administrators, and even the full-time student. Raines and Myran argue that the "entire college staff will need to develop increased interest and capacity to serve our new constituencies: senior citizens, ethnic minorities, women, low-income groups, handicapped persons, institutionalized persons, and so on. The community college is being challenged to move from its preoccupation with college-age students to a concern for lifelong learning. This concern will be expressed by serving the unique educational needs of members of constituencies who previously were given only marginal attention. Community involvement as an instrumentality for institutional and professional renewal is an idea whose time has come for the community college" [46].

To achieve these laudable objectives, the college's community services director must overcome a number of potential hazards or barriers if he is to achieve his larger objective. Offering non-credit courses flies in the face of a well-established tradition in all of higher education--credit is the commodity which colleges sell to their potential consumers. It is also the criteria by which states offer support to their higher educational institutions. Once a consumer has accumulated a certain number of credits, he trades these in for a degree. The degree in turn determines his admissibility to a variety of careers. For those interested in college transfer, credit is still an unavoidable requirement. But for many adults or non-transfer oriented students, credit courses arranged in semester sequence do not fill the bill. Alternatives are clearly needed, particularly when it comes to the determination of the amount of financial support to be offered to a college by the state.

We state in Chapter 5 that the wave of the future for community colleges will be to serve all adults, not just the traditional college-age student. Yet the community college seems destined to continue its fixation on the late adolescent. College presidents, administrators, and even state legislators must come to recognize that adults impose a different set of demands.

Another, not uncommon, institutional barrier to the development of improved community service programs is the tendency to continue the traditional offerings because few staff members are ready to accept new responsibilities. Changing community requirements may force role incumbents to adapt. Just as the hunted rabbit hopes to make himself less visible by standing motionless, so, too, do many faculty members when faced with the prospect of disrupting their "standard operating procedures." For this and other reasons, there is often a substantial lag between the emergence

of a community need and an effective response to that need. The community service director can help to shorten that time lag particularly if he is supportive of innovative procedures designed to respond to community needs. We often find innovative approaches to instruction in the community service program which are then adapted or replicated by other departments of the college. This experimental potential of the community service program can be seriously hampered, however, by the lack of adequate resources or resistance on the part of more conservative administrators within the larger organization.

Community service programs also enjoy a certain freedom in the selection of instructors, many of whom are recruited from the community. The fact that many are paid at an hourly rate and are non-tenured makes it possible in some states for these personnel to avoid the more stringent credential requirements laid down for full-time faculty members. This, of course, carries with it a mixed blessing in that many of the community service program faculty are paid at a rate substantially below the full-time faculty member. The advantage is that the college can now offer community service programs at a relatively low cost to participants. The disadvantage is that they may not be able to attract the best talent. Recent developments in collective bargaining may end or reduce this flexibility in hiring. Such an eventuality might well eliminate the extensive use of community resource persons, while the rise in salaries could price the community service programs out of the market.

Most community service efforts operate on a "pay as you go" basis covered by fees charged to participants. A few states, such as California, Maryland, Florida, and Illinois, do have legislation providing state support for community service programs of a noncredit nature, but the majority of states do not. Federal funding, while providing some isolated

and dramatic examples of the potential of community services, to date is an inadequate source of funds when measured against the need. We anticipate that more states will move in the direction of recognizing the legitimacy of community college expenditures in support of community-oriented services but until that happens many community service programs will continue to operate on uncertain financial footing.

Another obstacle blocking adults from full participation in community service programs can be attributed to the problems that they encounter when attempting to enroll or attend classes. The need for care of dependents, the lack of transportation, a sense of inadequacy in the learning situation, and inflexible work schedules--these are some of the situations that keep them from taking part. Supportive services should be provided by many community colleges to assist adults in overcoming these obstacles. Day care centers, financial aid programs for adults, more accessible college facilities, corrective and remedial programs designed specifically for adults, and flexible scheduling represent just a few of the attempts to help adults in overcoming their practical or psychological handicaps.

Future Developments

Several important programs have evolved under the rubric of community services, each with a special mission. What follows is a description of these programs, which, if taken as a whole, might comprise a comprehensive community service model. In selecting these examples from among an array of possible services, the following three criteria were employed:

a. Would the program serve a common denominator of needs of various constituent groups in the community?

b. Would the service provide an opportunity for students and faculty to participate productively, both in terms of serving community needs and

in terms of the participant's own personal development?

c. Would the response of the community college have a visible impact on or benefit to the community?

The examples which follow were taken from our field visits and from the work of the Kellogg Community Service Leadership Program of Michigan State University.

1. Community-College Resource Institutes By 1980, community colleges will have established a variety of quasi-permanent institutes focused on community problems. These institutes will operate in cooperation with other community agencies or groups as nonprofit education corporations, addressing educationally related problems within the broad areas of concern such as unemployment, drug abuse, poliution, housing, etc.. Such institutes would parallel the program suggested by the late A. A. Liverright in his vision of 1980 where colleges and universities would serve as effective community resources for adapting education to persistent and unresolved needs. We recommend that college-community resource institutes focus on clearly defined and critical community problems, with careful attention to community recommendations but not circumscribed by such recommendations. The proposed institutes should be structured on an ad hoc basis with community-wide visibility, permanent staff and adjunct staff, reasonable autonomy, strong linkage to companion agencies and with a heavy focus on the education implications of the problem under focus. Task-oriented teams of specialists supervised by a strong team leader capable of subordinating his own needs for ego gratification would tackle community problems in a collaborative spirit.

Prototypes for such institues are now in operation in a few locations. Lake Michigan College in Kalamazoo, Michigan, for example, sponsors an Institute for Professional and Paraprofessional Development. Participants from community agencies are being assited with human relations problems that

grow out of the effort to achieve fuller use of paraprofessionals in a community agency, civic government, or school setting.

The institute can also provide a desirable way of involving college faculty in the life of the community. Periodic sabbaticals should be provided to qualified faculty members so that they might work on a full-time basis in areas of related professional interest such as pollution control, manpower development, or inner-city renewal. Not only should the institute provide for the involvement of qualified professionals as consultants on highly technical problems, but should also serve as a much needed device for faculty renewal and student involvement in community affairs, as they build supportive educational programs and seek to establish knowledge delivery systems. The institute might also serve as a recruitment mechanism whereby community personnel with particular skills could qualify as adjunct instructors at the college.

2. Community Guidance Centers By 1980, most community colleges will be operating community guidance centers which will assist adults in career planning, personal development, and educational planning. Such centers can and should be funded by city, county, or state agencies. Plans are being laid at the present time to tie local employment service offices with community college guidance centers thus extending the range of services that are currently being provided by both types of organizations.

A prototype of the community guidance center might be the Rockland County Guidance Center for Women, now in its fifth year of operation. It has provided career development counseling for approximately 400 clients per year and career information for another 2,000. The center was launched with special funds from the state of New York; however, after two years the center was forced to become self-sustaining through client fees supplemented by county appropriations. The budget of the Rockland Center averages about

$60,000 per year.

3. Satellite Learning Centers Within the last two years, several new models for the provision of postsecondary learning opportunities have emerged. Cluster colleges, universities without walls, mini-colleges, SUNY's new Empire State College, Brookdale Community College's Central Campus Concept -- all represent ways of providing a college education without necessarily meeting in classrooms or being physically located on a campus. The concept of satellite learning centers will be to provide both credit and noncredit courses in storefront classrooms, through educational television, and in other ways which provide easier access for the potential student.

Several community colleges have moved in this direction already. Oakland Community College has established 28 off-campus centers enrolling approximately 4,000 students, many of whom claim they would not have gone to any of the three established campuses within the college district. Brookdale's program calls for the establishment of a central campus which contains only those essential facilities that are too costly to duplicate elsewhere in the district. Classrooms, libraries, and educational media will be located in off-campus facilities throughout the district. Laney Community College, one of several community colleges within the Peralta District, Oakland, California, sponsors two community service centers offering both vocational education and noncredit courses, such as a course in English as a Second Language. Rockland's mini-colleges offer special purpose programs to small groups of students (100 or so) off campus. All are attempting to make educational opportunities more convenient and accessible.

4. Faculty Renewal Systems In the past, most programs for the updating and renewal of faculty members represented continued graduate work towards an advanced degree. While such planned study does qualify the

successful candidate for administrative responsibilities and pay raises, it all too often proves to be of limited value in helping the faculty member to better understand and effectively relate to the needs of students and the community. An intimate knowledge of the ethnic backgrounds and life styles of students would facilitate the faculties' ability to develop curriculum outlines and adopt teaching strategies that are more relevant to the needs of their constituents. Since many community colleges are located in the middle of urban "laboratories" where a great deal of potential knowledge could be gleaned through involvement, faculty renewal programs can and will be programmed around providing opportunities for faculty members to become involved and to be of service.

Such a program will help to ensure that "action" research skills, consultant opportunities, and involvement in planned change efforts will aid immeasurably to strengthen and broaden the perspective of faculty in their potential role in the community. A carefully structured reward system (graduate credit, reduced work load, travel) for participants will help to insure that the return on the time invested by faculty is equal to the output.

5. Community Information Systems By focussing on identifying, collecting, processing, analyzing, and disseminating information about the community, local community college staffs could come to understand the range and nature of the expectations reflected in the various constituencies being served by the local college. Community needs and expectations would, in this fashion, be systematically reviewed for use by the college in its planning of future activities. Such "user-oriented" activities will help to ensure that the system is responsive to the concerns of the community. The various groups within the community will be encouraged to use this system in order to plan appropriate activities and to exploit whatever expertise might be available through the local institution.

6. Knowledge Linkage Systems. One of the more challenging but potentially useful functions a community service program can perform would be to serve as a linking pin between community groups and outside resource groups. University or industrial know-how will be effectively tied to "user" groups with the staff of community service centers serving as "extension agents." It will interpret the needs of the local community groups to potential consultants. Universities, various governmental agencies, industrialists, and consultants represent some of the potential resource groups who might be tapped.

The Human Resources Council in Montcalm County, Michigan, initiated through the leadership of the Community Services Department at Montcalm's Community College, established a part-time director who served as a coordinator of the various agencies, institutions, and other groups in the community devoted to community services. At Lake Michigan College in Benton Harbor, Michigan, the Southwestern Michigan Council for Continuing Education has been formed to coordinate and plan continuing and adult education programs on an area-wide basis. The Kellogg Community Services Leadership Program at Michigan State University operates by means of close, inner-college cooperation between three Michigan community colleges and the University. The four institutions jointly consider such matters as program development, administration, evaluation, research, and community problem solving. The consortium provides a ready-made means of bringing university and community college resources into the local community.

These six prototype programs, if put into practice on a broad scale, will do much to insure a close and harmonious relationship between a college and its constituents. The reciprocal benefits to be derived -- the community college staff discovering that it can be of service, the community resolving a chronic problem in a systematic manner -- will provide the

motivation that will eventually bring the two entities closer together.

C. Career Education

A wide variety of career education programs have emerged in recent years as legitimate offerings of the community college. Aided by recent legislation, career education at the postsecondary level is attracting increasing numbers of students who view it as an avenue for self-realization and economic security. The Vocational Education Act of 1963 and the amendments of 1968 helped to re-orient the federal role in vocational education by recognizing the need for funding of innovative programs offering alternative pathways for preparing students, particularly the disadvantaged student, for emerging occupations. A percentage of these funds were earmarked for students at the postsecondary level.

How well the major objectives of this landmark legislation have been served nationally is difficult to assess. The existing federal information system from which national data are extracted was designed originally to monitor how well states succeeded in meeting the requirements of the federal legislation. Definitions of what constitute vocational enrollments vary dramatically from state to state. Common criteria for determining who are the disadvantaged, adult, and part-time students is also lacking. Little is known about the characteristics of part-time students enrolled in career education programs and about the quality of the learning experience available to them. What we do know is that postsecondary career education programs are expanding and expanding fast.

Barriers and Constraints

Improved instructional strategies for career education, while they have received a good deal of attention, have yet to be widely accepted. Because of the long tradition of federal aid for vocational education,

dating back to 1917, many of the programs and practices established then have continued to command a lion's share of the federal appropriation. Only recently, in the expansion of federal support for R and D in vocational education, has the pace of experimentation accelerated.

Continued support for vocational education over the years has also enabled the state directors of vocational education to build a strong political base among key state legislators and officials. The comparatively recent arrival of state community college directors has made it more difficult for them to line up political support among state legislators to ensure some consideration when career education funds are allocated. Because much of the past effort in vocational education has been concentrated at the secondary school level, some state directors of vocational education have evidenced a reluctance to endorse or support the expansion of postsecondary vocational education in other than area vocational schools, institutions which happen to be under their direct control.

Moving from the state to the local level, one of the major goals of public community colleges has been to aid adults and older adolescents in their preparation for employment. Responsiveness to local labor market opportunities has been aided by the extensive use of advisory committees made up of employers and union representatives from the local community. Unions have traditionally depended upon the occupational training opportunities offered to their members by the public community. Adults have evidenced their enthusiasm for postsecondary programs by their continued willingness to enroll in both day and evening courses. The success of graduates from community college career education programs has been documented by a number of recent follow-up studies [48]. Why the concern, then, with this area of activity?

Our study findings establish that career education within the community college setting is experiencing difficulties. In the chapter on faculty characteristics, we analyzed the attitudes of the liberal arts faculty, many of whom see little value in providing a career training option to students. This point of view, together with substantive problems encountered when attempts are made to merge the liberal arts curriculum with the occupational, has resulted in few effectively articulated curriculum offerings of cluster courses. While there tends to be among the career education faculty widespread interest in the concept of an "organic curriculum" which combines the need to develop intellectual skills with those required for entry into an occupation, examples of a successful melding process are difficult to find. Where faculty teams composed of specialists from various disciplines have been able to integrate their program objectives into a unified curriculum plan, positive results have been achieved [4, 7]. But team planning requires a high order of human relations skills and a willingness to subordinate departmental or disciplinary interests to the larger interest. Few faculty members have been trained to plan and work with representatives from other disciplines.

Not only are there problems of horizontal articulation and collaboration within an institution, but communication links with other institutions purporting to offer career education programs to local residents are lacking. There are very few reasons why a high school principal or the director of an area vocational school should not collaborate with the department chairman or dean of career education located at a nearby community college, but state and district administrative structures militate against such cooperation. Because of the relative autonomy enjoyed by vocational education from the local tax support base, vocational high school and area vocational school directors can, if they choose, "go it alone" in deciding on what

vocational courses to offer. Duplicate offerings and non-articulated courses at high school and community college levels are the result.

While the high cost of poor articulation and duplicate offerings within some communities underscore the need for improved inter-institutional communication, there is growing evidence that vocational education as a discipline has not kept pace with the requirements of a computer-based, post-industrial society. The rise in service occupations, for example, has put a premium upon courses in communication skills (writing, listening, speaking, and reading skills) which were not as much in demand during an earlier era of a production-oriented society. Inter-personal or human relations skills required to establish and maintain open and effective communication with customers must now be acquired through other channels than those provided by our public schools. Unfortunately, even some of the graduates of the certificate or associate degree programs can be described as not having achieved an adequate level of verbal fluency. Many carry with them a dislike of learning which will hinder or reduce their motiviation to continue their learning beyond their formal years of education. What should have been the joy of discovery and personal achievement for many has been replaced by disillusionment and frustration.

Students as well as faculty continue to think of the career or terminal degree program as something quite different from the college parallel program. A majority of students, uncertain with regard to their future career interests, pursue the college parallel program because they have some vague notion that they will want to transfer to a four-year institution at a later date. Their perceptions are distorted by status needs and the expectation of heightened mobility. Even those with definite career interests will sometimes shy away from career programs for the same reasons. Since only one-third of this group eventually transfer to a four-year institution,

the remainder either drop out or settle on an associate degree without qualifying for a career. Those hoping to enroll in the college parallel program at a later date soon discover that it is difficult to transfer without taking a number of additional credits. Because of the sometimes narrowly focussed career education curricula and the attitudes of university and college registrars toward career education programs, those who wish to make the change are severely handicapped.

Past attempts at improving career education programs at the postsecondary level have tended to deal with fragmented pieces of the learning system. Those responsible for implementing improvements are beginning to recognize that each subsystem or part of the learning experience must be viewed within the total context of the college environment. Unless career education reforms are undertaken with the total system in mind, attempted changes in one or two areas will be short-term demonstrations at best.

Future Implications

The growing dissatisfaction with traditional career education programs, where the emphasis is put upon lectures and "canned" films and filmstrips, will give ground to programs centering on individualized education. The following five examples of emerging approaches offer new alternatives for resolving the more important issues in postsecondary career education.

1. Matching Students with Jobs The demand for skilled workers seldom develops independently of the existing labor market and institutional arrangements for training. Acceptance for employment of graduates from a program designed to train teacher aides, for example, requires close coordination with potential employers. Setting up realistic licensing and credentialing requirements (and the potential opposition from those with vested interests in occupations where such responsibilities are already

lodged) will require the full cooperation and collaboration of those who will serve as gatekeepers.

The ability to provide students, guidance counselors, and curriculum planners with detailed job information and skill requirements will make it possible not only to keep training programs current and relevant, but also to aid students in making appropriate career choices. Martin Katz and E.T.S. in conjunction with Mercer County Community College, Trenton, N.J. [33], have designed a computer-based guidance system which enables students and counselors to readily obtain career information in such a form that students can estimate their own chance of success in a given occupational field.

The students are given the opportunity to test the efficacy of their more closely held values by assuming various career roles and observing how their values conflict with the value systems commonly associated with those occupations. (By means of this computer simulated career experience, the students are helped to evaluate their hierarchy of values in terms of the compatibility of such values with those most often found in selected career areas). This computer based System of Interactive Guidance and Information (SIGI) will eventually serve several institutions within the Trenton Metropolitan Area linked together by means of leased telephone lines. The major restraint in terms of participation of institutions outside the Trenton area would be the cost resulting from the leasing charges associated with a telephone hookup.

The College of DuPage in Illinois now provides a Computer Vocational Information System (CVIS) for nearby Willowbrook High School [19] as well as for its own students. This individualized vocational information system provides students and counselors alike with on-line access to career information. Off-line reports of student interaction with the

computer is also available for use by counselors. The high school students in the area are able to ascertain what nearby colleges and vocational learning opportunities are available together with possible sources of scholarship aid. Information on local employment opportunities are also stored and retrieved by means of the computer. The students ar given access to all information pertaining to their advancement as well as their own achievement and aptitude test results. Tests are interpreted for the student by the computer and provides them with the opportunity to compare their own scores with various normative groups.

G. Brian Jones of the American Institute for Research has been working closely with Foothill College in California to design a guidance system which enables the student to make more realistic career choices and career plans starting with an intensive needs assessment effort. The student is given a deck of cards to sort, each card containing a particular goal. The resulting goal hierarchy is reviewed by a counselor who then helps the student lay out an appropriate sequence of learning opportunities around the individual student need's inventory.

2. Faculty Training Pre- and in-service training for those in the technical and vocational fields is different from the training which those who teach the liberal arts and general education courses receive. While the master's degree is often a minimum requirement for the latter faculty, there is considerably more latitude given to those in the career education field in terms of accepting work experience as the equivalent of graduate work. Many consider this practice to be one of the strengths of community colleges because of the flexibility it offers in faculty recruitment; however, it does tend to intensify the split between those in the academic programs and those teaching non-academic courses. Our interviews with faculty representatives

lead us to conclude that cooperation between the various faculty groups would be enhanced if such groups are given the opportunity to share in a common pre-service training experience which emphasized the unique goals and functions of community and junior colleges. By building a common identity for all faculty members through exposure to a core program of this type during pre-service training, better understanding and cooperation between the academic and non-academic instructors will be achieved.

A number of dramatic efforts in teacher training aimed specifically at preparing new faculty for teaching roles in junior colleges are now underway. The Union for Research and Experimentation in Higher Education located on the campus at Antioch College, in cooperation with five teacher training institutions, has designed a masters degree program [21] for the preparation of community college instructors. Graduates of this program are expected to complete five to six years of training (including two years of undergraduate work at a junior college) combining internship experience by means of cooperative education with individualized learning opportunities while in training.

Eastern Washington State College has designed a pre-service faculty training program for technical faculty members based on the concept of developing the faculty's ability to counsel students as well as master an occupational specialty. Effective teaching skills are developed around internship experience, a thorough knowledge of instructional techniques, familiarity with various media, and an understanding of the learning problems of students with widely varying educational capacities and interests.

3. Individualizing Instruction and Career Education While considerable attention has been given to designing individualized instructional procedures for junior college students of varying ability levels and learning styles, the full impact of such procedures in occupational

education programs has yet to be felt. Effective exploitation of this concept by the career education faculty member will require a raft of new teaching materials and administrative procedures, as well as profound attitudinal changes. The faculty member will take on new responsibilities such as evaluating individual student progress, prescribing learning sequences, testing and repeating this same cycle as the student moves from one level of skill to another.

The Naval Academy in Annapolis, Maryland, has demonstrated the feasibility of self-study and multi-media programs in occupational education. It has successfully field-tested a computer-managed instructional system in three subject areas covering the freshman year at the academy. Two of the three courses are vocational in orientation.

Oakland Community College near Detroit, Michigan, has been attempting to personalize its learning process by tailoring its curriculum to individual student learning styles. By working with its students to develop a personalized plan of study, graduates of the applied sciences and arts program are expected not only to qualify for work in one of seven broad occupational clusters but will also have established a sound base for continuing their formal education toward a four-year college degree if they elect to do so. Each student is expected to develop an individualized plan of study with the aid of a battery of diagnostic tests and counseling. Through a process of "cognitive style mapping," a team of teachers and a student jointly plan a personalized study plan geared to accommodate and exploit the student's strengths and weaknesses. A computer is used to keep track of the individual student's progress [42].

The multi-media instructional system at Mt. San Jacinto College in California has built its programs around the careful specification of instructional objectives so that individual study, small group sessions,

large group and lab sessions can be fully exploited. Students obtain much of their lecture material and instruction from taped lessons and worksheets. They are permitted to proceed at their own rate of speed and receive credit when earned. The instructor serves as a consultant and diagnostician ready to provide assistance when needed.

4. Simulation and Troubleshooting Perhaps of greatest use to the career educator and the vocational guidance counselor will be simulation games and equipment. Career games, introduced and developed by such pioneers as Sarane Boocock [8] and John Krumboltz [34], have gained widespread acceptance among vocational guidance counselors and others concerned with helping students make appropriate career choices. Boocock's "Life Career" game is designed to assist students in thinking through the implications of alternative choices available to them at various stages during late adolescence and adulthood. Krumbeltz's problem solving experiences simulate career exploration by material enabling the participant to try typical chores associated with a given profession or occupation. Following an hour or so of simulated work in, for example, accounting, a prospective trainee might be induced to pursue a career in that particular occupation. If not, he'll be just that much more experienced for having tried at least a sample of the accountant's work.

In previous years, most of the training equipment employed by vocational educators simply duplicated the tools and machinery an employee would be expected to know how to operate on the job. Because much of this "on-line" equipment is not designed for instructional purposes and often fails to take into account such considerations as safety, costs, or space restrictions, such equipment is not well suited for the classroom. Simulated equipment offers training experiences under similar operating conditions at a considerably lower cost. Often the simplicity of the

equipment makes it easier for the instructor to train the student in the basic skills with high transfer potential of what they have learned to actual production equipment in a relatively short time.

Among the newer instructional procedures to be employed in career education is the use of a small computer to simulate defects in a trouble-shooting exercise. The student is required to make systematic tests using a schematic diagram in order to find the cause of improper equipment performance. As a learner develops his diagnostic skills, the level of difficulty in searching out the defect can be increased. A large variety of diagnostic exercises can be provided through this simulation approach.

5. Articulated Tracking. A few institutions are re-defining their requirements for both the career and the college transfer program. The career program students are given credits which closely parallel those required for college transfer. Many students in the career program who will want further study beyond the two-year level at some future date will be able to acquire it if their achievements have been properly accredited. Core curricula are being designed which crosscut departmental specialties. Individual guidance is being provided so that each student is better able to make an intelligent choice before entering a particular career program. Students who have an interest, for example, in the applied arts are encouraged to take courses in the humanities and social sciences in order to help them achieve greater insight into their career field. Cooperative education (coordinated work/study programs) is offered as an integral part of the curriculum. Off-campus experience adds the needed dimension of providing job training and exposure to a variety of possible working environments.

Perhaps the best curriculum plan yet devised for community college students was outlined by Norman C. Harris at an AAJC conference on occu-

pational education. A comprehensive junior college should "take students where they are and prepare them for their next goal in life--be it matriculation at the state university or caring for the sick in the general hospital. All students on the campus are college students, and curriculum planning should reflect this philosophy. All occupational education curricula should present a carefully balanced mix of general and liberal arts education, theory and technical support courses, and specialized skill courses" [28, p. 467]. Harris proposes that beginning students in a community college should flow in either of two directions. Fully qualified students would move immediately into general education and basic core subjects. Others with certain deficiencies would move into a one-semester or longer developmental program. In a typical curriculum plan, five core areas would be provided for those working toward an associate degree in occupational education: (1) a general education core including courses in English, humanities, political science, etc., (2) a basic core in engineering technology and industrial technology, (3) a basic core in business programs, (4) a basic core in health programs, and (5) a basic core in public service programs. Each of the occupationally related cores would offer specialized courses for the chosen field of technology following 20 or so credit hours in the basic core curriculum. Graduates would receive an associate degree in their selected field, e.g., electronic technology, data processing, dental technology, law enforcement. Harris' concluding comments are as appropriate today as they were in 1966.

> We cannot continue to put three-fourths of our junior college educational effort on the needs of one-fourth of the students. Middle-level youth in junior colleges outnumber "superior" youth by 3 to 1. It is high time that we stopped neglecting their educational needs--high time that we stopped regarding occupational education as somehow being not respectable. The needs of average students are also the nation's needs in this era of change. The junior college can serve all of its students and

the nation in the decades ahead. It is our challenge to see that it serves both well [28, p. 47].

D. Developmental Educational Programs

The challenge of the open door college can most often be dramatically witnessed in the classroom. The heterogeneity of student backgrounds and ability levels forces many a faculty member to re-examine his traditional teaching methods and to work with each student in whatever way is effective. Literally millions of dollars and untold man-hours of effort have been invested in diagnosing and prescribing compensatory learning programs for those students who, based upon their normative test scores, are judged unlikely to handle college-level requirements successfully. Every community junior college counselor knows the limitations of such predictions, particularly when applied to students from disadvantaged backgrounds. Helping to see that such predictions won't come true has become the responsibility of a special breed of educator, those in charge of the remedial education programs.

The old concept of remediation implied that something had to be done to the student to make him eligible for entry into a college program. The modern student development programs are designed to assist students in acquiring those skills and attitudes needed to achieve their unique goals and aspirations on their own terms. The advent of Bloom's concept of mastery [6, 7] has brought with it a shift in emphasis away from making a student eligible for entry into a program toward an emphasis on helping the student achieve whatever goals he may commit himself to at his own rate and in his own way. The term "developmental education" will be used in this analysis, rather than the more limited concept of remedial education, in order to encompass the broader program of helping students determine where they are and where they want to be.

Community junior colleges, unlike their four-year counterparts, strive to accommodate all applicants, be they over-achievers or under-achievers. A fair number of these students lack confidence in themselves and the necessary learning skills to cope with college. Many have unrealistic aspirations, making them candidates for special counseling. Compensatory or developmental programs attempt to satisfy aspirations by moving beyond the conventional wisdom that low achievers don't have the ability to measure up. Such efforts start with the assumption that all (or most) students have the ability to achieve under the right circumstances. Standardized tests calibrated by administering them to large groups of middle-class Whites have little utility when administered to urban Blacks. The disadvantaged student, for example, who failed to develop adequate reading and communications skills in high school and who carries with him the scars from his earlier encounters, reacts in quite a different manner to the competitive environment of the college classroom than do the students with well developed verbal skills. What the low achiever needs is someone with whom he can identify on an emotional level, experiencing a sense of acceptance and concern, rather than admonitions to match or exceed a non-relevant set of performance standards.

A recently completed study at Miami-Dade Junior College [37] reported that first-time college students who scored below the twenty-first percentile on the verbal section of the SCAT test were also in need of some form of intensive psychological counseling. Most suffered from lack of confidence, shyness, and an inability to work with authority figures. The report observed that the emotional problems of the low achiever were as significant as his poorly developed learning skills. To cope with such problems requires a system which reinforces in a positive way the student's sense of selfworth and at the same time provides him with an opportunity

to develop his intellectual abilities. How to design and install developmental programs that handle such divergent needs requires a body of well-tested procedures. Very few now exist, but those that do are well worth the effort to describe them. Before outlining these promising examples, however, some attention needs to be given to the reasons why others have not succeeded.

Barriers and Constraints

Even though the concern for the low achiever in community and junior colleges dates back almost to World War II, empirical evidence of successful programs which meet the needs of such students are noteworthy by their absence. Roueche [47], after a thoroughgoing review of the literature on the topic, concluded that little effort has been made to evaluate the effectiveness of these programs. What evidence there is, together with the findings of Project Focus, reveal the following problems.

Most community and junior college faculty are ill-prepared to handle the underachieving or low-aptitude student. Those selected for the job frequently enjoy low seniority and no tenure. Such assignments reflect the fact that teaching a remedial course is a low prestige assignment. (There are notable exceptions to this practice and they will be cited later). The inexperienced faculty member, often fresh out of graduate school, has had little in the way of orientation or training in coping with the special needs of this group of students. Too few resources and inappropriate instructional materials conspire to defeat even the most conscientious instructor. The absence of alternative ways of linking student and tutors, faculty and students, and students with students fuels the fires of frustration.

Not only do faculty members often feel unprepared and inadequate in meeting the needs of the special student, but the objectives for developmental programs are often vague and sometimes contradictory. Whether developmental programs are expected to salvage or provide students with a second chance, "cool out" the student, or serve a custodial function has yet to be determined in many institutions. Goal clarification would enhance the probability that students assigned to developmental programs would perceive them as potentially beneficial experiences rather than ones to be avoided.

Many low-achieving students come from families where there has been limited contact with higher education and little encouragement to pursue a college degree. Since such families place greater value upon their offspring's earning ability, they encourage them to find employment immediately after high school. College attendance, they feel, demands financial means beyond the capability of the family. In short, there is little reason for students from such backgrounds to aspire to or understand what college has to offer. Those who do enroll, often do so with the idea that college will advance their career mobility more rapidly than work experience. Unrealistic aspirations coupled with uncertainty make such students less apt to persist in their efforts when confronted with learning difficulties.

Students are assigned to developmental programs primarily on the basis of their verbal skills as assessed by standardized achievement tests and previous record. If a student falls below a certain cut off point on a curve, he is automatically assigned to the special aid program. Unfortunately, below-average performance also implies that the student is inferior. How valid these criteria are when applied to those reared in an urban environment who speak the language of their own subculture has been a legitimate point of contention among minority groups for the past decade. Malcolm X Community

College, for example, refuses to use the word "remediation" when dealing with low achievers and attempts to work with the student where he "is," based on his unique set of qualifications and level of development. By avoiding some of the stereotypes associated with poorly developed verbal skills, Malcolm X College is charting individually tailored development programs for all of its students.

Standardized achievement test scores have been found to be poor predictors of a student's performance in occupational education programs. Measures of verbal ability do not help in predicting the students manipulative abilities. Nor do achievement tests measure the psychological dimensions of the student. The underachieving student often lacks the confidence and is emotionally unprepared to cope with a community college environment. The inability to handle test situations effectively and to relate to authority figures also conspires against the student who has been told over and over again that he does not measure up.

With increasing pressures to accept all students who apply for admission and with the belief that a college degree is a passport to the future, low-achieving students are entering community and junior colleges at an accelerating rate. Chapter 3's report on student, faculty, and president perceptions of goals demonstrates that there is an increasing sense of commitment to effectively serve this segment of the society. Roueche sums up the issue when he states: "With pressures from society to lengthen the educational experience of all students, the low-achieving student has become conspicuous in community colleges. No semantical niceties will cover or hide the issue. No matter what the student is called, his problem is the same. To the extent that community-junior colleges can identify these students and provide meaningful educational experiences for them, the institution has implemented the concept of the open door " [47, p. 15].

Future Implications

The low-achieving student has been handled in one of three ways by most community and junior colleges. The first is to assign him to a required series of remedial courses, a practice we've already examined. The second is to provide a variety of special services such as tutoring, intensive counseling, and individualized study. The third approach attempts to modify the administrative support structure in order to facilitate the continued enrollment of such students in the hope that they will eventually improve. Modification of registration and grading procedures and the accommodation of students on probation describe the more familiar administrative adjustments.

These strategies have been only partially successful because they have not attempted to deal with the student on his own terms in the total learning environment. What follows is an idealized approach pieced together from observations made during visits to a number of innovative institutions throughout the course of the study. Where specific examples suit the situation, they are offered; but this should in no way be construed as an exhaustive inventory of on-going programs.

Tomorrow's institutions will select their most able instructors to work with the low-achieving student. As learning specialists, they will enjoy a certain status and administrative backing in their efforts. The training of this cadre of learning specialists will help them to understand and accept the idea that all students can achieve, but that all students are not necessarily predisposed to a verbally oriented instructional mode. This select group of instructors will be selected because of their student-centeredness rather than their institutional orientation departmental identification.

Miami-Dade Junior College has recently established an experimental program for the low-achieving student which builds upon small groups of no more than eight students linked with a carefully selected, well-trained instructor or group leader. These close-knit groups are purposively structured to ensure close student and faculty involvement with each other. If, for example, a student should fail to show up for a class on a given day, one or two of the other students and frequently the instructor will drop by after class to see what happened. Financial aid problems are quickly remedied through the provision of a special fund that the instructors are permitted to tap for emergency purposes. The sense of closeness and group identity aimed for in these small primary groups reinforces the importance of the individual's commitment and his feeling of rapport with the group.

In addition, the North Campus of Miami-Dade has set up a small Office of Staff and Organizational Development (OSOD) specifically aimed at assisting individual faculty members in the establishment of new instructional procedures and experimental courses for dealing more effectively with the "new" student. A group of internal consultants are tapped to facilitate faculty training and development along the lines just described. While the role of OSOD extends beyond improving the staff's capability for working with low achievers, it has been one of their primary areas of concern to date. They hope to introduce tested innovations in a variety of offerings which will motivate the faculty to work more effectively with students on an individualized basis. The traditional instructional patterns of the past are being replaced by more flexible learning opportunities designed to accommodate individual student learning styles.

Perhaps even more important than finding and training competent staff members and building a climate of concern for the student is a recognition

of the need for the individualization of counseling and learning experience. By accepting the student where he is at the time of entry into a community/junior college and putting him in situations where he can succeed, we will do much to ensure optimal progress. By considering the total student, his self-concept, his motives, his learning styles, his strengths and weaknesses, trained counselors can help each student determine his own plan for advancement.

Instructional technology will be employed to assist faculty members and students alike in adapting learning materials and procedures to individual differences. Such technology will aid administrators in the more efficient allocation of time, staff, and resources to the achievement of more clearly specified goals and objectives. Career training through television, computer-aided instruction, and programed instruction are just a few of the ways that are being adopted for the improvement of student learning rates and abilities. The faculty member in such programs will be at the heart of the system but will also take on new responsibilities. As a learning manager, he will diagnose and prescribe learning sequences tailored to individual needs. He will need to maintain an up-to-date awareness of new instructional materials. Such materials will include courses aimed at strengthening the student's career awareness, citizenship responsibilities, societal values, and a sense of self-awareness and personal worth.

Compton Community College in California has designed a program that seeks to determine a student's level of achievement, identify his strengths and weaknesses, and then put him into learning situations where he can become a complete person. Success experiences are the rule, not the exception. Few students are put on scholastic probation. Career education students are encouraged to take general education programs and vice versa. Most important, counselors help students arrange flexible programs of study

designed to achieve the student's educational objectives, not those of the institution.

Institutions such as Contra Costa Community College are providing low-achievers with the opportunity to work closely with tutors (many recruited from student ranks) on a one-to-one basis. Such tutors are trained to look upon every student as a worthwhile person with unique capabilities. It is up to the tutor to assist in discovering these sometimes hidden characteristics and allow them to flourish and grow. Their assumption is that in the tutoring situation the student will feel free to ask questions and to review materials without the fear of slowing down the rest of the class. Learning acquires a new dimension when a close personal relationship develops with the tutor.

Involvement of the student in more intimate group relationships, tutoring on a one-to-one basis, and recognizing the needs of the total student help the low achiever begin to view the instructional program as a rewarding one. By replacing essentially negative perceptions with favorable ones through positive reinforcement and support, students will be less likely to avoid or withdraw from such programs. Improving the student's self-concept and helping him to establish more realistic aspirations is as important to the low achiever as improving his basic learning skills.

To sum up these observations on the direction that developmental education programs ought to be moving, one could hardly improve upon the statement made in a report to the Junior College Division of the Texas College and University System by its Compensatory Education Project [18]. It begins with the recognition that motivation is the key to the high failure rate among many disadvantaged students. "The most promising solution to this problem...is a motivational program in which students are

given a taste of success, helped to develop some self-respect, helped to develop realistic and attainable career objectives, helped to feel they belong at the community college, and helped to develop skills in reading and communication." The proposed Texas program will start with those areas in which the students can do well. It then hopes to provide new skills, with the recognition that frequently the people who can help the most are faculty members from similar ethnic backgrounds or other students of like orientation. Failure experiences are avoided, including massive testing programs. They recommend that the use of rigid cutting scores on a single placement test be discontinued and that a student's past record, his motivation, and his native ability (as determined by culturally unbiased test measures) be used for placement and evaluation purposes. In this way, educationally handicapped, the minority, and the low-achieving student is helped to feel that he belongs and that he has a person or a group with whom he can identify in a primary-group fashion.

CHAPTER 5

THE PRAGMATIC 70's

The United States is well embarked upon what may be described as the "Pragmatic 70's." The idealism and expansiveness of the 60's is shifting to a concern among younger adults with finding and holding a job. Such a shift largely reflects the dramatic move in a few short years of our population gravity center from late adolescence to early adulthood. The wave of war babies, having vented their dissatisfaction with the nation's educational institutions, is about to crash against the shore of a tightening labor market. Almost 12 million more young adults will be competing during this decade for jobs requiring higher levels of education and training. Seventeen-year-olds became, in 1964, the largest single age group in this country. They will remain so until 1972. Every year since 1964, the seventeen-year-old group has grown larger than it was the year before.

The shock that young adults will be experiencing upon entering an overcrowded labor market will be strong. During the decade, 40 percent more people will be seeking jobs each year than in the previous year. The war babies of the late 40's and early 50's have just begun to infiltrate today's labor market in large numbers, many of them doing so after taking a few years out for college, military service, or travel. Since half of our males and about two-fifths of our females elected to go to college during the latter part of the 60's, the full impact of this group on the labor market is just beginning to be felt.

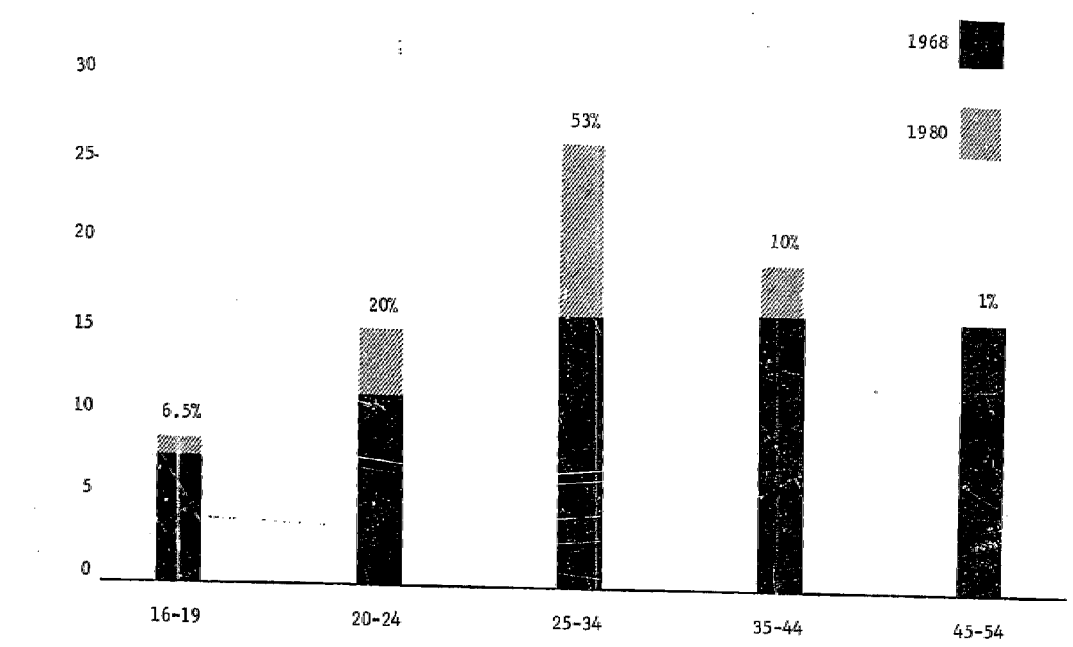
This upsurge of aspiring workers will glut the labor market, creating a condition of forced leisure for those in the lower and middle-level occupations. Too few jobs to go around will motivate unions and employers alike to shorten the work week, thus spreading the work load, and, in the process, creating more job opportunities.

Work and leisure may well become the primary concerns of the modern generation. Chart I reports the percentage of population growth by various age groupings through 1980. Note that the age group 20-24 and 25-34 will show the most dramatic increases during the decade. Those falling into this age bracket, we predict, represent the most significant enrollment growth potential of community colleges precisely because of their need for occupational preparation and retraining. The shift upward in the average age of full- and part-time students already reflects a move in this direction. To accommodate the needs and expectations of an older, more self-directed, and more highly motivated student body will require major adjustments in teaching methods, faculty attitudes, and course scheduling and organization, prerequisites for enrollment -- in short, all of those courses, procedures, and traditional practices which were geared to the youthful impressions of the traditional (19-20 year old) college age student.

Current trends suggest that there will be a lessening in demand for higher education during this decade, with the exception of public community colleges. The Carnegie Commission on Higher Education [14] reports a "go-stop-go" situation between now and the year 2000 with overall enrollments in higher education expanding at a considerably reduced rate during the 70's (as contrasted with a doubling of enrollments during the 60's), not expanding between the period 1980-1990, and again increasing, this time by one-third, during the 90's. These predictions are based upon several assumptions, e.g., that approximately 50 per cent of the "college-age"

CHART 5.1--PROJECTED POPULATION SHIFTS BY AGE

1968 -- 1980



population will be enrolled at any one time. The Carnegie Commission [14] forecasts that enrollments will grow more in accord with societal growth during this and the following two decades, in contrast with their rate of g: h over the last century when enrollment doubled every 14 to 15 years. This projection, coupled with our own observations on population trends, lends credence to the prediction that the "non-traditional" student, those over 21, many married and working full time, may well account for much of the enrollment increases within public community colleges during this decade.

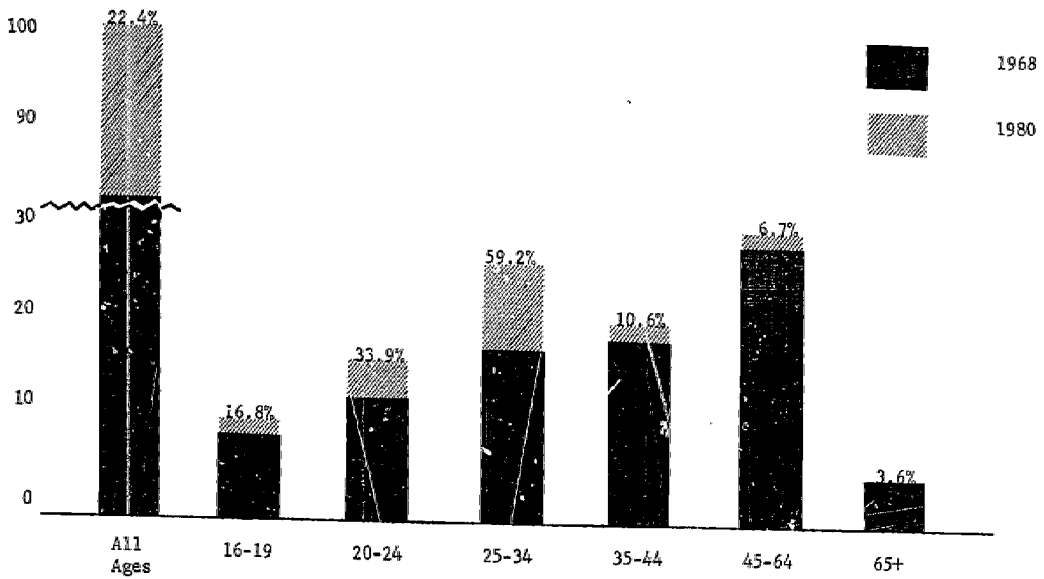
By 1980, the Bureau of Labor Statistics [10] predicts slightly more than 100 million gainfully employed workers (see Chart 5.2). More workers will be coming into the labor force pool (41 million) than will be leaving (26 million). Of those making up the increased supply, 34 million will be new, young workers looking for their first jobs, 6 million will be women who delayed working because of their children, and 1 million will be immigrants. To qualify for the more appealing and remunerative careers, many of these "new" workers will require training at a postsecondary level. Others already in the labor force will seek to enhance their earning power and position through retraining and upgrading of existing skills.

Just what effect the expansion of young adults and women participating in the labor market will have on the number of adults seeking job preparation or retraining is difficult to predict. Our data indicate that 50 percent are working 15 hours or more a week while attending college full time. The median age for part-time students is 27 and rising. Increased leisure time and more flexible course scheduling, not to mention the dispersal of learning activities into offices and homes, will make it increasingly possible for these adults to participate in college-level courses while continuing to work.

CHART 5.2 PROJECTED LABOR FORCE SHIFTS BY AGE

1968 -- 1980

Millions of Workers

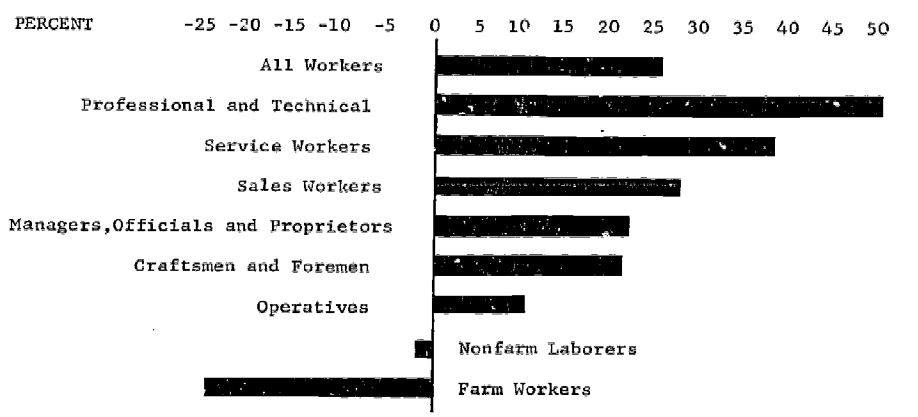


Source: The U.S. Economy in 1980, A Summary of BLS Projections, U.S. Department of Labor, Bulletin 1673.

The number of those in the 25 to 34-year-old bracket will grow by almost 60 per cent during the 1970's. One out of every four workers, 26 million in all, will fall into this age group by 1980. Increased job competition will force many to reconsider their career goals and seek out more viable opportunities. The more talented and ambitious will be able to fill slots now reserved for those in their mid-careers (35 to 44), because changing job requirements will make it difficult for some older workers to adapt and because of the short supply of workers in this older age category. Replacement of older by younger workers will, to some extent, be a result of the higher level of education attained by the younger workers. This fact may serve as a spur to mid-careerists to increase their participation in part-time training and educational programs. Those with higher levels of educational attainment (and better developed learning skills) will fare better than those without.

The continued rise in the number of high school graduates and persons attending college will not only raise the overall educational attainment level of the nation's labor force but will also tend to raise the job entry requirements making a two-or four-year college degree mandatory for occupations once requiring lower levels of educational attainment. There is also one complicating factor of a predicted oversupply of engineers and teachers now in training in four-year college programs. Just what effect they will have on the market for paraprofessionals in these areas is difficult to predict. Chart 5.3 projects the number of job openings by occupation through 1980 in selected fields. What may appear to be ample opportunities for employment in these areas can of course be distorted by employer requirements which favor the college graduates, be they two-or four-year degree holders. The outlook for those with associate degrees continues to be optimistic. One of the more salient reports from the Bureau of Labor Statis-

CHART 5.3--PERCENT CHANGE IN MAJOR OCCUPATIONAL GROUPS, 1968-80 PROJECTED



Source: U.S. Department of Labor, Bureau of Labor Statistics, Occupational Manpower and Training Needs, Bulletin 1701, Washington, D.C.

TABLE 5.1--EMPLOYMENT OPPORTUNITIES BY SELECTED OCCUPATIONS, 1968 AND PROJECTED 1980 REQUIREMENTS

Selected Occupations	Employment in 1968	Projected 1980 Requirements	Percent Growth	Annual Openings
Engineering and Science Technicians and Draftsmen	915,000	1,325,000	45%	46,300
Dental Hygienists	16,000	33,500	109	2,400
Library Technicians	70,000	125,000	77	9,000
Police Officers	285,000	360,000	27	15,000

Source: U.S. Department of Labor, Bureau of Labor Statistics, Occupational Manpower and Training Needs, Bulletin 1701, Washington, D.C.

tics entitled "College Educated Workers, 1968-1980" [9] comments that the "extensive network of community and junior colleges in the United States has been beneficial in many ways." They cite the institutional flexibility or responsiveness to local manpower needs as a definite plus factor. Students from low-income families and others who could not afford college are now able to attend. In 1964, they report, about 34 per cent of all junior college students (full- and part-time) were in career training programs. In 1968, the number of career students increased to 40 per cent Our data indicate that approximately 25 per cent of the full-time students enrolled in the spring of 1971 were pursuing a career education degree or certificate. While job placement information has been scarce, two recent studies [4,48] demonstrate that associate degree holders find jobs more quickly, are better paid, and advance more rapidly than graduates of technical institutes or high school-level vocational programs. The Godfrey and Holmstrom study revealed that 80 per cent of the junior college students graduating with an associate degree in 1967 went on to enroll in additional educational programs on a full- or part-time basis. A third of this group received their bachelor's degree two years later. Those who elected to go to work immediately following graduation from the junior college were earning substantially more than the median wage for all 20 to 24-year-olds in 1969. Junior college associate degree holders, according to the Somers and Fernbach study, advanced more rapidly than technical institute graduates with an average rate of return of 14 per cent on the investment.[1]

1. The controversy surrounding just what benefits college graduates derive from their investment in a postsecondary education is not easily resolved. Hanson and Whitmer speaking at the American Council on Education's 54th Annual Meeting argued that the rate of return on the investment on two years of college does not exceed 10 per cent. While they do not cite any recent studies directed at AA degree graduates, they make the unwarranted assumption that the individual rate of return for students completing one to three years of college is the same as a student completing a two-year program of study. Clearly the two references cited above represent more focussed assessments. The problem of the comparability of various populations of students, e.g., technical institute graduates and community college graduates, opens to question the validity of the findings of a number of a number of cost-benefit studies of the type described.

Emerging Employment Opportunities

Many of the job opportunities requiring technical-level skills are expected to expand during the 70's. Student interest in career education programs at the postsecondary level will continue its upward trend, reflecting an upsurge in demand for clerical workers, technicians, service workers, and proprietors of small business enterprises. Clerical occupations alone are expected to expand by 35 per cent from 12.8 million in 1968 to 17.3 in 1980. Technicians in the engineering and science fields and in the health service occupations will expand by roughly 61 per cent This figure does not include some of the newer social work aides, marine technologists, and environmental technicians.

The increased demand for engineering and science technicians and draftsmen reflects the increasing complexity of modern technology in the private sector. Production planning, technical sales, continued emphasis on automation of the industrial process, and the growth of new employment areas such as space and underwater exploration and atomic energy will add to the demand. Employment changes and replacements for those who die, retire, or transfer to other occupations will total well over 400,000 by 1980, an average of almost 45,000 annually.

A recent study conducted by AAJC /2_7 under the sponsorship of the Bureau of Health Manpower determined that the number of graduates from allied health occupational training programs swelled from approximately 5,000 in 1960 to over 34,000 in 1970. The variety of training opportunities ranged from home aides to the two-year associate of arts degree nurse.

One of the fastest growing occupations, staffed primarily by women, is the field of dental hygienics. By 1980 total employment in this sector is expected to reach 33,500, an increase of approximately 109 per cent above the 16,000 employment figure for 1968. The demand for hygienists is

expected to increase as a result of the expanding demand for dental care and increased awareness on the part of dentists that employing dental aides is good business. The expected increase of approximately 109 per cent above the 16,000 now employed in this field represents an annual rate of growth of 9.1 per cent, a considerable increase over the average 2.4 per cent increase in employment during the decade of the 60's.

Library technicians will continue to be in great demand during this decade. By 1980, an increase of 77 per cent above the 70,000 employed in 1968 is expected. The continuing shortage of professional librarians and an expanded number of public and school libraries are the basic factors underlying this expanded requirement. Those with formal postsecondary training will continue to replace those who obtain their qualifications on the job. Employers are expected to require an A.A. degree as more formally trained library technicians become available. Since the present output of technicians is very limited (110 per year) a greatly expanded program is needed to fill the estimated 6,500 library technician job opportunities annually.

In 1968, 285,000 full-time policemen were employed in local police departments. By 1980, employment requirements for police officers are expected to reach 360,000, an increase of 27 per cent. As cities increase in size and complexity, police forces must be expanded to meet the demand. Emphasis upon advanced training in sociology, psychology, and minority group relations will heighten the demand for some postsecondary education. Annual openings of an estimated 15,000 to fill new slots and replace those who change jobs, retire, or die will have to be met. Since approximately 2,000 persons are graduated each year from police academies and community colleges, the number will have to be expanded rapidly to keep up with the demand, particularly for those police officers who require special law

enforcement training.

This sampling of occupations underscores the need for an aggressive response by community colleges to changing requirements and opportunities. Many of these occupations, because of their social service orientation, will appeal to a broad cross-section of students from a variety of socio-economic backgrounds. Service to humanity strikes a resonant chord among many in the younger generation who feel the need (and, to some extent, the peer group pressure) to help close the gap between the promise and reality of a democratic society. Many from more affluent backgrounds are motivated to serve those less fortunate. Those from disadvantaged backgrounds will continue to be motivated by extrinsic rewards, but many will want to return to their neighborhoods to help those less fortunate. Both groups will find ample opportunities for self-realization in the "helping" professions.

Of the estimated four million job openings annually during the 70's, 40 per cent will require some form of postsecondary education. Many, while non-professional in nature, do represent the expanding employment opportunity of the future.

Work and the New Student

The shift in population density from late adolescence to early adulthood will result not only in an increased competition for jobs requiring more than a high school diploma but will bring with it a re-emphasis upon the traditional values of thrift, self-reliance, and achievement during this decade. The concerns of the adolescent, e.g., achieving independence from parents, developing a personal sense of identity, and gaining social and economic status, while still important areas of emphasis for the adolescent, will not be the paramount concerns of the junior college student who, on the average, will be older than his four-year college contemporary. The college students of the 60's did pretty much what they wanted to do, with some focussing their attention on dissent and protest. These interests

will give way to the desire to qualify for employment in order to meet their own and their families' economic wants. Stiff job competition will leave less time for other pursuits.

The interest in gainful employment will not necessarily reflect a return to those values associated with the Protestant ethic, however. Work (and its attendant benefits) will no longer be viewed as an end in and of itself. In spite of the President's plea to return to the work ethic of the past, many workers will be looking for employment opportunities which will allow them to serve mankind but, at the same time, enable them to enjoy a sense of self-fulfillment or to pursue leisure-time interests. Some will elect to invest their increased leisure in upgrading their work skills in order to qualify for higher levels of responsibility. Others will seek to enhance their artistic skills in the interest of self-expression.

The student of the 70's will be more tolerant of ambiguity, will be more rational in his career decisions, and will evidence greater maturity than his predecessors of the 60's. He will be the product of a shrinking world. Through travel and television he will have witnessed the discrepancies between the values of the older generation and their behavior. His sensitivity to inequality of opportunity and all the other unrealized promises of a democratic society will make him want to redress this inconsistency through his own efforts. His career interests will permit him to serve mankind while avoiding the trap of poverity itself.

The increased participation of older students in our community and junior colleges will create a more mature and stable climate at these institutions. Who are these potential students? Our interviews with a broad cross-section of students gave us some clues. A number of women that we interviewed during the span of the study reported that they are

ready for second careers now that they have successfully raised their children. For some this took the form of strengthening or updating already acquired skills. For others, it represented earning additional credits towards an A.A. or B.A. degree.

Many of the part-time male students whom we interviewed were seeking to change their occupations or to qualify for higher levels of responsibility and income. For others, it represented a chance to update their skills in their chosen field. And for others, it meant more intellectual stimulation and rediscovery of the rewards of a "liberal education."

Returning veterans will make up an increasingly large percentage of both the full-time and part-time enrollees. Almost a third of the returning Vietnam War veterans have elected to enroll in a local community or junior college. As benefits like the GI Bill, or comparable federal support programs become more available, it is anticipated that more and more students from all walks of life will want to take advantage of a college education.

Shifting Values

To attempt to trace the persisting and emergent values of our society in any detailed way would require a volume well beyond the intended size of this report. The more abstract or all-pervading values such as "honesty," "justice," and "democracy" will continue to shape individual behavior in this country but there are several important emerging values which also warrent investigation.

Three important shifts in values reflecting recent societal trends stand out from our survey data: (1) acceptance and re-evaluation of the concept of equal educational opportunity, particularly as it applies to the "right" of access to at least two years of postsecondary education,

(2) emergence of a consumer ethic in conjunction with what some have labeled our post-industrial society, and (3) a growing awareness of the rewards of contemplation and creative self expression in an increasingly automated and mechanistic society.

Federal support for a postsecondary education for all (with its attendant emphasis upon expanded student loans) demonstrates congressional endorsement of the concept of universal education through at least 14 years of education. Minority group members and students from low socio-economic status have come to accept access to a postsecondary education as a right, not a privilege. This egalitarian concept is not only strongly supported by minority group members and the disenfranchised but by those of middle class and upper middle class origins. Such expectations have already reshaped the response of institutions of higher learning. Open colleges, external degree programs, "universities without walls," these mechanisms are designed to make college available to any and all potential enrollees. The demand for access will increase during the decade and become more and more a central issue in any federally sponsored program.

The post-industrial society has been characterized as a period of rapid expansion and consolidation of private business into larger and larger organizations with streamlined production methods utilizing machines in place of people. This shift from human to non-human methods of production will result in increased leisure, pressures to spread available work opportunities and a continuing rise in the number of people employed in the supply of human services.

Higher production through automation has helped to spawn the age of the computer, a necessary instrument for controlling and linking together sprawling enterprises. The demand for computers and the need to amortize their high costs by means of increased production and greater efficiency requires administrators and technicians who are able to trouble shoot balky equipment and plan ahead. Expanded automation of many phases of the industrial process and the de-humanizing of work will lead some to seek out jobs with a more humanistic bent. As the number of workers required to maintain our high level of productivity diminishes, so will the value of work as an end in and of itself. The educational and religious institutions of the past helped to reinforce the significance of work. With less emphasis upon high human productivity, the values associated with a "consumer society" will begin to take precedence.

As lower level work opportunities become scarcer, the pressure for a more equitable distribution of such opportunities and the resultant increase in leisure will give rise to a new set of values associated with the "nonproductive" uses of such leisure. Much of our leisure time will continue to be expended in three areas: play, contemplation, and service to others. Community and junior colleges will serve to enhance the use of leisure in at least two out of these three areas. Older workers, accustomed to a work ethic, will need to be assisted through education to shift to a "leisure ethic." Younger adults will want to develop work skills which make it possible for them to serve others. Both groups will need to become more consumption oriented.

Implications for Community Junior Colleges

These emerging social values have profund implications for the future role of community and junior colleges. If, as we suggest, tomorrow's

community college student will be the product of a shrinking world, one who seeks a more internally consistent set of values, then our institutions must be ready to respond to such expectations or be prepared to bear the brunt of student activism. Tomorrow's students will evidence greater concern with shaping their own destinies. Curriculum offerings and institutional procedures need to be planned with student participation. Independent study opportunities, more flexible course schedules, and greater attention to individual learning styles will be required. College students are demanding that the learning process be shaped to their requirements and not arranged just for the benefit of the faculty and staff.

Faculty members, in working with such students, will be expected to be more open, honest, and democratic. An atmosphere of equality and interest in the student will emerge. College administrators will want to be more responsive to community needs, particularly those that reflect the concerns of the disadvantaged. Institutionally based, discipline-centered programs will give way to learner-centered, community-oriented programs. Educational opportunities will be provided where the potential student lives or works with course offerings adjusted to his requirements on a part-time basis or in concentrated periods.

The vitality and rapid growth of community and junior colleges during the last decade helped to underscore the appeal that this form of higher education has to its constituents. Increased competition for scarce dollar resources and, eventually, for more students suggest that the community-oriented college can no longer get by on promises alone. A shifting population base and the changing character of our work ethic should serve to forewarn those administrators who are futuristically oriented that their institutions must respond in appropriate ways or go under.

Changing Character of the Community

Willingham [54], Peterson, and others [44] have observed that one of the causes of student protest is the absence of concern among faculty members with solving the problems of the larger community. A focus on the problems of the community and the need to more effectively serve the "new" student has brought the community colleges into center stage as the potential meschanism for meeting community and individual student needs. The impression that some institutions (most frequently four-year institutions) give of being "above the fray" is hardly calculated to win the support of community members. As we saw in Chapter 3, even community college presidents and faculty tend to place a concern with social issues and community problems well down their list of priority issues while students emphasize the "formulation of programs in a number of public policy areas such as pollution control" among the upper half of the goals to be served by their institutions. Serving the needs of the community and the development of more flexible ways of assisting the marginal student emerged from our study as among the top ranking priorities for community colleges during this decade.

America, as a modern industrial society, has become an increasingly urbanized society. Lecht observes that "by 1975, over three=fourths of all Americans will be living in urban areas....As urbanization proceeds, expanding metropolitan centers will emerge to form a new social and economic unit--the megalopolis" [36]. Not only will the concentration of population in five or so megalopolitan centers bring with it problems of transportation, recreation, housing, and land and water use, but it will also place new demands on community and junior colleges. The rapid in-out migration of persons in many of our nation's population centers, coupled with the changing ethnic, socioeconomic, and age composition of these

populations make it virtually impossible for anyone to "know" his community without making a conscientious and continuing effort to do so.

A more effective linkage of the community college with its constituents would serve two purposes: (1) it would help the college in its assessment of the expectations of the community, and (2) it would help the community's awareness of the policies and programs of the college. The latter function is receiving increased attention, but the former function has yet to be addressed systematically. If the college is concerned with an effective two-way communication program, then it must implement ways of surveying community feelings and expectations and follow through with effective responses to the survey results. Other, perhaps less systematic, means for involvement of community representatives through advisory committees, the board of trustees, and periodic open forums will also be needed if community expectations are to be understood and effectively served.

The growing interest in community service programs and lifelong learning or continuing education programs have been outlined in Chapter 4. The demand for such learning opportunities and relevant community services will continue to rise, paralleling the mix of age groups and ethnic backgrounds in the area being served. The use of the college facility as a lifelong learning center, as a place for convening community-oriented workshops, and as a meeting place for community organizations will continue to expand. The number of community-based advisory groups, many representing the special interests of local employers, minority groups, older age groups, etc., is also likely to grow. While the response of community colleges to these local interests have been in the past uneven, new prototype systems are now emerging which can serve as models for the future.

Governance Structures for the 70's

Bold responses to the educational and training needs as outlined are in order. More rational planning and decision-making procedures must be merged with continued attention to diverse student requirements. This emphasis on expanded services for community groups will necessitate some adjustment on the part of administrators and faculty. How to balance and accommodate the needed reorientation and shifts in decision-making authority will be the focus of this last section of the chapter. In so doing, we will touch upon the roles of administrators, trustees, faculty, students, community groups, state legislators, and state educational administrators.

In the past, community colleges, unlike many of their four-year counterparts, have operated on the principle of a strong chief executive who made decisions unilaterally. Faculty and students were not privy to the thinking behind most of the major decisions affecting their work or learning opportunities. Faculty groups could advise but were not often authorized to act on this advice without review by higher authority. In this sense, the governance structures of community colleges were more like the bureaucratic arrangements of public elementary and secondary schools than like other institutions of higher learning.

As this report and others [49] have demonstrated, faculty, student, and community groups will no longer sit passively while their destinies are shaped for them. Shared decision-making procedures are in the process of being implemented. The proper roles of state, district, and local institutions are now in the process of being hammered out, but their ultimate role has yet to be identified.

We have devoted considerable attention to identifying the potential of impact of these social and economic trends on community colleges. A recent

study [50] found that old structures are undergoing change. Tillery, through a nationwide survey, determined that 40 per cent of the public community college presidents anticipate some change in their organizational structure within the next two to three years. Departmental structures are no longer the preferred pattern of organization unless grouped under larger divisions. He found a greater interest in inter-disciplinary structures reflecting a shift from the traditional subject matter departmental lines to problem-oriented or career program-oriented divisional structures. Cluster college arrangements were a preferred mode of organization for approximately 20 per cent of those responding to the Tillery survey, indicating an increasing interest in this concept. Community college presidents also indicated a desire to reduce the number of institutional units (70 per cent of the colleges reported that they had less than 10 instructional units, e.g., a political science department, and those with more preferred fewer). This emphasis upon greater interdisciplinary coordination offers some hope of breaking down the traditional communication barriers between instructional units within the conventional college structure.

Tillery also found that the presidents tended to feel that their current structures were designed to satisfy the concerns of faculty members but not designed to respond to student or community needs. Our own survey findings reflect this same attitude. A number of presidents observed that they saw structures determining goals and not, as one might expect, the other way around.

Obsolete structures which primarily benefit staff members will no longer be tolerated. The key will be to evolve a "results-oriented" administrative system where the success of the institution will be judged in terms of the impact it has on students and the community. Specifying

goals and objectives in terms of the "output"--improving student performance, resolving community problems--of the institutions makes it possible to incorporate a new array of learning and administrative procedures, accepting those that work and getting rid of the obsolete or nonproductive practices.

One caveat, however, needs to be stated. A "results-oriented" approach to administration, if used without consideration of the interests of those directly involved, can foster resistance on the part of faculty or other staff if imposed from the top down in the name of "scientific management." Shared decision making and a sense of participation can help to alleviate this potential hazard.

Chief executives at the local level must not only learn to share their decision-making authority with others at the local level but must be increasingly concerned with the assumption of power at the state level. Wattenbarger, [53] has expressed his concern over this seemingly irreversible trend. He observes that where local control presists community colleges enjoy rapid expansion, e.g., California, Florida, Michigan, Illinois, and New York; but where control has become centralized at the state level, such as in Wisconsin and Georgia, the growth and responsiveness to community needs has been limited. The variety of curriculum offerings has been richer where local control prevails. Wattenbarger concludes that the "locally operated junior colleges were more faithful to the philosophical criteria which are generally used to identify the community junior college." [53 pg. 9]

Presidents are not unaware of their loss of decision-making authority. In our survey of the perceptions of community and junior college presidents, we asked the questions, "How influential is your local or district governing board as compared with state agencies in setting

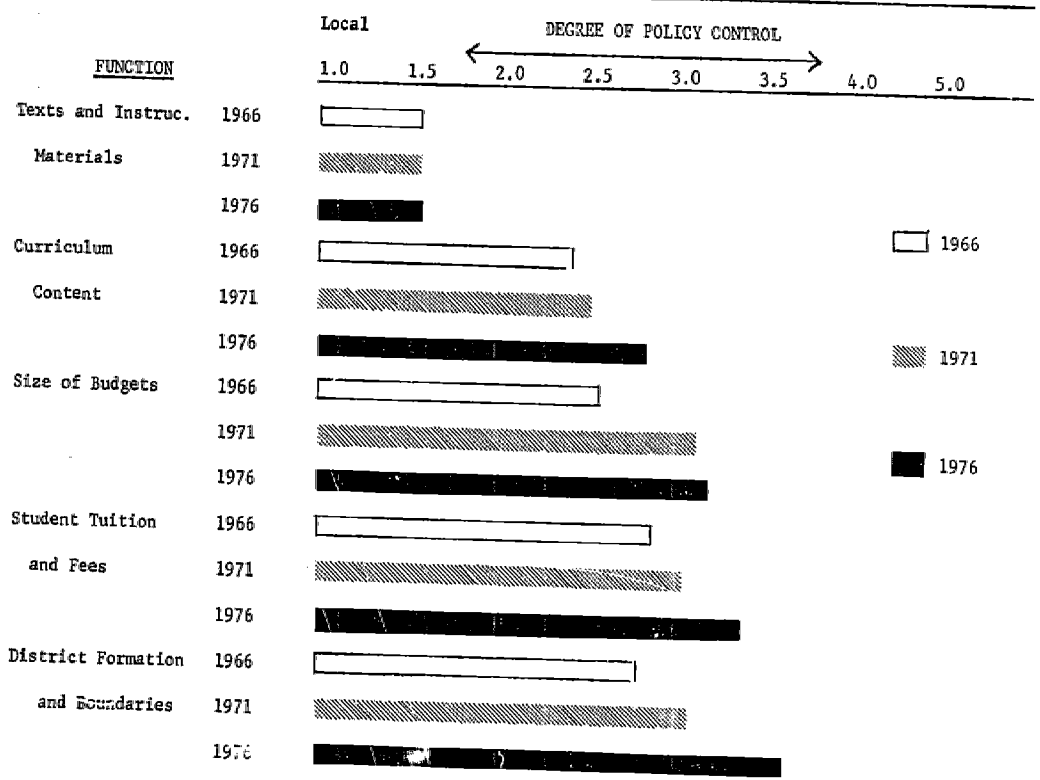
policies for each of the following functions at your college?" They were asked to judge in several policy areas the degree of local or state control five years ago, presently, and five years from now (responses could range from #1 "fully local" to #5 "fully state"). Chart 5.4 reveals that policies governing the selection of text and instructional material, the type of curriculum to be offered, and admissions were in the past and will continue to be, the responsibility of local policy makers. On other issues, such as determining the amount of student fees and tuition, the establishment of district boundaries, the determination of the size of operating and capital budgets, and educational facilities specifications, the responsibility for overall policy has moved in the direction of state decision-making authority. These latter areas of concern all point to increasing responsibility at the state level.

At the campus level, presidents have recognized that trustees, faculty, and students should be more involved in decision making. This shift toward shared responsibilities in the determination of local policies is principally the result of the rise in collective bargaining practices, the growth of multi-campus districts, and the increasing maturation of the student body. When asked whether their board of trustees was taking a greater or lesser interest in the demands of various constituent groups, 57 per cent of the presidents surveyed reported that trustees were taking more interest in faculty demands, 68 per cent observed that trustees were more interested in students, and 48 per cent reported that trustees were showing more interest in local community groups. Clearly, trustees are perceived to be assuming greater responsibility and interest in the needs and demands of those they represent.

While more of the decisions affecting the goals and priorities of junior colleges will be made in state capitals in the future, local insti-

CHART 5.4 -- LOCAL AND STATE POLICY-MAKING CONTROL

(PUBLIC INSTITUTIONS ONLY)



tutions will be experimenting with new mechanisms for facilitating community-wide participation in decision making. The degree of influence exercised should be commensurate with the competence of the group or its potential contribution to the over-all capability of the institution to achieve its goals. How and in what proportion each group should be represented must reflect the extent to which they are affected by those decisions over which they should have some control. How much authority should be given to a council, a faculty senate, or an assembly, as we indicated earlier, is in the process of being hammered out.

The redistribution of authority needs to be made explicit with those sharing in the responsibility for the implementation of that authority, keeping in mind the broader interest of the institution as well as their own parochial interest. If students, for example, are to take responsibility for those areas in which they are more directly affected, e.g., dress codes, student disciplinary actions, grading practices, and instructor evaluation, then they should be held accountable for their decisions. But they must also share in the responsibility for creating an environment which facilitates learning. Faculty, if they are to exercise their responsibility for admission policies, curriculum offerings, and certification, must be held accountable by students, administrators, and the board, for the overall smooth functioning of the institution. The president's role will become more and more of a coordinator's role requiring that he maintain the loyalty and support of all factions making up the campus community. His principal concern will be to enunciate the goals to be served. How and who will serve them will be secondary to this overriding interest.

We foresee a continuing tension between state and local authorities over who will set priorities and what those priorities should be. The issue is not either/or, but really one of trying to carve out the approp-

riate role for each decision-making body to play in ensuring that the larger public interest is met, scarce resources are allocated effectively, and those most directly affected (students, taxpayers, faculty, administrators) have an opportunity to shape those policies and decisions affecting them.

A division of labor differentiating between the responsibilities of administrators at the campus level, at district levels, and at state levels are beginning to emerge. The task at the local level will be to implement programs which are responsive to priorities set at the district level and to identify the resources needed to carry out such programs. The district level responsibility will be to differentiate and specify which curriculum offerings and career education opportunities are to be provided by the multiple institutions making up the district and to allocate funds accordingly. Statewide agencies will be required to specify the long-range goals and priorities for districts so that the statewide higher education needs are met.

With these differentiated responsibilities go the caveats: Any statewide system must permit questions of educational policy to be openly debated and the resulting decisions facilitated, not inhibited by, concern for efficiency and economy. As dollar resources shrink and as the administrative tasks become more complex, it is obvious that a public community college program will require strong leadership at state, district, and local levels. Such leadership requires an ability not only to establish and implement new programs and to evaluate and modify existing programs, but also to plan and involve those concerned in the decision-making process.

SUMMARY AND CONCLUSIONS

All evidence points to this decade as a period of consolidation and stability for community and junior colleges. The movement of war babies from late adolescence to early adulthood will presage a sharp rise in the number of twenty to thirty-five year olds seeking work, many for the first time. The shock of competition in the labor market will motivate these young adults to seek out entry level occupational training as well as training for higher level responsibilities. The demand for white collar workers and technical level personnel will continue to expand rapidly, particularly in the service occupations, while the number of blue collar and production oriented occupations will slow down. More women will be seeking to refurbish their occupational skills in order to re-enter the labor market once their children reach school age.

The values associated with work will change. Rather than perceiving work as the measure of a man's personal worth it will be viewed as a mean's to an end. A consumer-oriented society with it's attendent emphasis on high productivity, automation of the methods of production, and the resultant need to spread the available work load, will lead to increased leisure and consumption of goods and services. More leisure time, particularly among the middle-class, will create an increasing demand for educational and enrichment programs oriented to the enhancement of one's avocational interests. Learning and creative self-expression will be close corollaries of the desire to utilize one's leisure in a more rewarding fashion.

The demand for equal educational opportunities will continue unabated. Disadvantaged and minority groups will continue to advocate a more equitable distribution of resources so that public education through the

the fourteenth grade becomes a reality for all who want to take advantage of it. The transfer of the educational cost burden from the property tax to state income and sales taxes, and increased federal support, will accelerate the trend towards centralization of policy making at the state level. The continued rise in the cost of education and it's prominence as a budget item will force state legislators and state educational officials to scrutinize budget requests more closely. Budgetary pressures will bring with them a rising concern for accountability and a thorough search for greater efficiency. The competition for scarce educational dollars will force state educational authorities to establish or revise state master plans for higher education with emphasis upon strengthening the quality of institutional leadership, faculty qualifications, the responsiveness to community needs (particularly career training needs), and fund raising capabilities. Local administrators will continue to carry the primary responsibility for assessing and meeting community needs while state personnel will assume more and more responsibility for setting overall policies, determining the size of budgets, establishing district boundaries and facility specifications, and spelling out which long range goals are to be served and by whom.

While enrollments in four-year institutions of higher education will plateau or decline during the decade, community college enrollments will continue to climb reaching a level of 4.5 million full and part-time students by 1980. Students will be older, more self-directed, and more certain of their career interests.

These trends will have several effects on our nation's community and junior colleges:

1. Continued support for the concept of the open door will require more effective developmental education program offerings. Tested alternatives directed at both strengthening the student's learning skills and motivation will be needed. Faculty members will require radically improved pre- and in-service training if they are to effectively meet the needs of a diverse array of students.

2. Greatly expanded minority group enrollment will require dramatic increases in the number of minority group faculty representatives, counselors, and administrators. Expanded recruitment programs and in-service training are needed to help resolve the current imbalance.

3. Strengthened lifelong learning programs will require institutional commitments and appropriate staffing well beyond the current level. Budgetary procedures and administrative support mechanisms will need to be overhauled to insure greater continuity of programming.

4. Improved ways of articulating career and transfer programs will need to be adoped if loss of credit is to be avoided. Clustered courses and core curricula will help to eliminate the separateness. Work study programs, part-time enrollment, intermittent enrollment, and external degrees offer promising alternatives to traditional procedures.

5. Closer linkage of the community with the college will be achieved through systematic needs assessment and communication efforts. Off-campus course offerings, community leader involvement in policy making, television coverage of campus events, outreach recruiting will help to insure a close collaborative relationship between the community and the college.

6. New organizational structures will emerge which encourage those who should participate in decision making to do so. The typical bureaucratic structure of the past with its hierarchical alignment of administrators, staff, and students will give way to a participatory management framework with both faculty and administrators serving as "learning managers." A results-oriented set of goals and objectives will facilitate a more effective allocation of resources for the benefit of the student and the community.

Our country's capacity for leadership and innovation is finding one of its most noteworthy expressions in the accessibility which community and junior colleges provide to students from wide ranging socioeconomic backgrounds. Demands for equal opportunity, social reforms, and self-realization can be met through these institutions. As bureaucracy and automation slowly erode our sense of individual identity, continued access to education will help us maintain and enhance our survival power in an otherwise inhospitable environment.

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APPENDIX A

Methodology

To obtain the information necessary to achieve the objectives of Project Focus, a literature search and communication links with existing data banks on community and junior colleges were established. Structured interviews, site visitations, and survey questionnaires (administered to community and junior college presidents, campus coordinators, students and faculty) were utilized to obtain relevant data from a nationwide sample of community and junior colleges. Various resource and advisory groups were convened for their reaction to and interpretation of findings.

This appendix provides a description of the sampling plan and the other data collection procedures used in the study.

Project Focus Sample Selection Procedure

A two-stage sampling design was used: the first provided a stratified sample of community and junior colleges, and the second a random selection of respondents within the selected institution. Various kinds of weights (explained on page 175) were required to make appropriate estimates of population parameters from the data obtained in the survey samples.

Universe of Community-Junior Colleges

The first step in selecting the sample of colleges to be utilized in this study was to determine the universe of community-junior colleges. Realizing that the number of institutions included in a community-junior college universe depends on the definition employed,* the community-junior college listing in the 1970 Junior College Directory, published by the American Association of Junior Colleges, was adopted. For logistical reasons, only colleges in the continental United States were considered--excluding colleges from Alaska, Hawaii, Puerto Rico, etc. Although AAJC includes within its count two-year branch campuses of four-year institutions, those two-year campuses which, in the opinion of the research staff, did not function as community-junior colleges and in reality were integral parts of their respective parent institutions, were also excluded from the universe. Thus, 56 two-year campuses from the states of Ohio, Pennsylvania, South Carolina, and Wisconsin were eliminated from the universe. Having adopted these two reservations, 956 community-junior colleges remained in the universe to be sampled: 721 public, 107 independent (non profit), and 128 church-related institutions.

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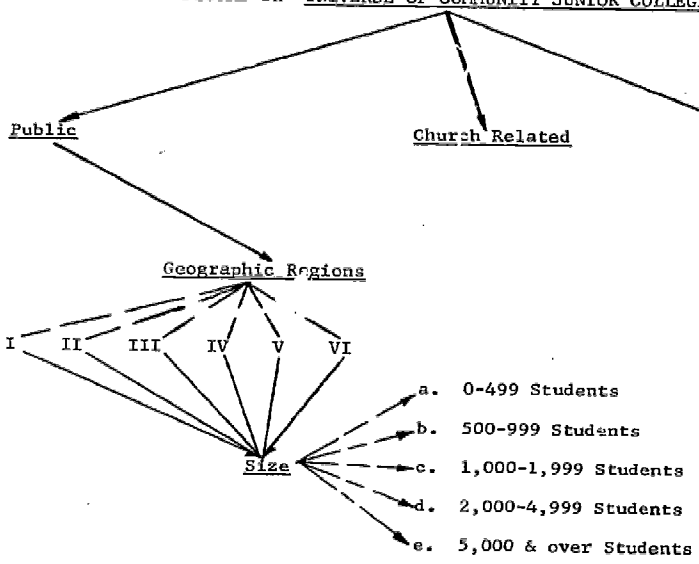
* The number of community-junior colleges reported by the American Association of Junior Colleges has traditionally been larger than that reported by the U.S. Office of Education. This is the result of different criteria. The AAJC criteria for inclusion are somewhat more flexible than those of the U.S.O.E. For example, two-year branch campuses are included. Not all institutions listed in the Directory are members of AAJC.

Sample Stratification

The universe of community-junior colleges was then stratified according to geographic area, size, public, church related, or independent. The following illustration depicts the manner of stratification. (See Figure 1a)

FIGURE 1a--UNIVERSE OF COMMUNITY JUNIOR COLLEGES



The universe was separated according to public, church related, or independent. The latter two were not broken down any further. The public colleges were classified into six geographic regions (see Table 1). The six regions are identical with the ones used by Vernon Hendrix in his earlier study of the impact of the junior college environment on students.*

* Vernon L. Hendrix, Functional Relationships of Junior College Environments and Selected Characteristics of Faculties, Students, the Administration, and the Community, a research report to the Office of Education, U.S. Department of Health, Education & Welfare, Project No. 5-0770, June 1967.

TABLE 1a

Region			
I	Maine New Hampshire Vermont	Massachusetts Connecticut Rhode Island	Pennsylvania New Jersey New York
II	Delaware Maryland Virginia West Virginia	North Carolina South Carolina Georgia Florida	Alabama Kentucky Tennessee District of Columbia
III	Minnesota Iowa Michigan	Wisconsin Illinois Indiana	Ohio
IV	Washington Oregon Montana	Idaho Wyoming North Dakota	South Dakota Nebraska
V	Arizona New Mexico Nevada Utah	Colorado Kansas Texas Oklahoma	Missouri Arkansas Louisiana Mississippi
VI	California		

In general, the regions were selected so that: (1) No single state dominates a region in number of colleges (for this reason, California was made a separate region), (2) the colleges were fairly evenly distributed among the regions (see Table 2a), and (3) the regions encompassed geographically, economically and culturally similar areas, i.e., the regions were similar to those generally used by economists, sociologists, etc. (See, for example, the analysis conducted by J. M. Richards, Jr., L. P. Rand, and L. M. Rand* on the regional differences in community-junior colleges.)

Within each region, the colleges were classified according to size category. The completed stratification resulted in 32 cells to be used for sampling purposes (see Table 3a).

Sample Selection of Institutions

The actual sample of colleges used was arrived at through a series of steps. An initial 10 per cent sample of each cell was decided upon. The colleges within each cell were arranged alphabetically and numbered accordingly from "1" to the number in the particular cell. Utilizing a random table, the sample colleges within each cell were randomly picked as their number appeared on the random table until a 10 percent ceiling was reached for the respective cells. No cell was left zero; each cell had to have at least one entry. Consequently, due to rounding, the overall percentage was slightly higher than 10 percent. The size of this initial sample was 100 institutions.

A letter with an accompanying post card (see Exhibit I) was mailed to the presidents of the 100 institutions during the latter part of January requesting their institutions' participation in Project Focus. Twenty-one of these institutions replied in the negative. As soon as turndown was received, the institution in question was replaced, however, with another chosen randomly from the initial cell.

Due to the rather severe time limitations of Project Focus, a deadline for obtaining replacements was set at March 26. By this date, 92 institutions (see Tables 3a and 4a) had agreed to participate. They constituted the final sample.

The institutions declining to participate were a heterogeneous group. Among the various reasons given for refusal to participate were the following:

> "Our staff is hard pressed...We are deluged with questionnaires--more than we can handle...We have a good number of time-consuming projects currently under way and feel that time will not permit the acceptance of this worthy project...We are preparing for an accreditation committee visit...We are convinced that the goodwill of the faculty in

(continued on page 173)

*J. M. Richards, Jr., L. P. Rand, and L. M. Rand, "Regional Differences in Junior Colleges," The Two-Year College and Its Students: An Empirical Report, American College Testing Program, Inc., Iowa City, Iowa, November 1969, pp. 27-40.

TABLE 2a.--NUMBER OF PUBLIC COMMUNITY-JUNIOR COLLEGES BY REGION, ENROLLMENT, AND SIZE
(in thousands)

Size Category	Region I		Region II		Region III		Region IV		Region V		Region VI		United States	
	No. of Inst.	Tot. Enr.	No. of Inst.	Tot. Enr.	No. of Inst.	Tot. Enr.	No. of Inst.	Tot. Enr.	No. of Inst.	Tot. Enr.	No. of Inst.	Tot. Enr.	No. of Inst.	Tot. Enr.
0-499	5	1.7	43	13.3	22	7.5	10	4.3	26	10.3	2	0.8	108	37.6
500-999	11	8.8	47	35.2	36	26.8	8	5.7	47	35.4	2	1.4	151	113.3
1,000-1,999	35	52.3	51	67.4	22	32.2	17	24.7	45	65.0	11	15.3	181	256.9
2,000-4,999	35	113.4	21	64.1	45	140.2	20	54.2	25	76.5	24	88.0	170	546.4
5,000-And Over	14	111.9	12	105.3	18	133.2	6	53.6	9	67.6	52	552.3	111	1023.9
Total	100	288.1	174	285.3	143	339.9	61	152.5	152	254.5	91	657.8	721	1978.1

TABLE 3a.--NUMBER OF PUBLIC AND PRIVATE COMMUNITY-JUNIOR COLLEGES IN DESIRED (D) AND ACTUAL (A) SAMPLE, BY REGION AND SIZE

Size	Region I		Region II		Region III		Region IV		Region V		Region VI		United States	
	D	A	D	A	D	A	D	A	D	A	D	A	D	A
Public Colleges														
0-499	1	0	4	3	2	2	1	1	3	3	1	1	12	10
500-999	1	1	5	5	4	4	1	1	5	5	1	0	17	16
1,000-1,999	4	4	5	4	2	2	2	2	4	4	1	1	18	17
2,000-4,999	4	4	2	2	5	4	2	1	3	3	2	2	18	16
5,000 And Over	1	0	1	1	2	2	1	1	2	2	5	5	12	11
Total	11	9	17	15	15	14	7	6	17	17	10	9	77	70
Private Colleges														
Church Related													13	13
Independent													10	9
Total													100	92

TABLE 4a.--PROJECT FOCUS COMMUNITY AND JUNIOR COLLEGES
Sample

P = Public
CR = Church Related
I = Independent

Alabama		
Alabama Christian College	Montgomery	CR
Arizona		
Mesa Community College--Maricopa J. C. District	Mesa	P
California		
Cabrillo Junior College	Aptos	P
Columbia Junior College	Columbia	P
Feather River Community College	Quincy	P
Golden West College	Huntington Beach	P
Laney College--Peralta Junior College District	Oakland	P
Los Angeles Valley College	Van Nuys	P
Palo Verde College	Blythe	P
Palomar College	San Marcos	P
San Diego Evening College	San Diego	P
San Joaquin Delta College	Stockton	P
Colorado		
Aims Community College	Greeley	P
Lamar Community College	Lamar	P
Trinidad State Junior College	Trinidad	P
Florida		
Marymount College	Boca Raton	CR
Miami-Dade Junior College	Miami	P
Santa Fe Junior College	Gainesville	P
Tallahassee Community College	Tallahassee	P
Georgia		
Truett-McConnell College	Cleveland	CR

TABLE 4a (Cont'd.)

Illinois		
Amundsen-Mayfair College	Chicago	P
Central YMCA Community College	Chicago	I
Highland Community College	Freeport	P
Malcolm X College	Chicago	P
Wabash Valley College	Mt. Carmel	P
Iowa		
Grand View College	Des Moines	CR
Indian Hills Community College	Ottumwa	P
Iowa Lakes Community College	Estherville	P
Southeastern Iowa Community College	Keokuk	P
Kansas		
Hesston College	Hesston	CR
Kentucky		
Elizabethtown Community College	Elizabethtown	P
Henderson Community College (University of Kentucky)	Henderson	P
Maysville Community College	Maysville	P
Maine		
Westbrook College	Portland	I
Maryland		
Prince George's Community College	Largo	P
Massachusetts		
Lasell Junior College	Auburndale	I
Massachusetts Bay Community College	Watertown	P
Mount Ida Junior College	Newtown Centre	I
Quinsigamond Community College	Worcester	P
Michigan		
Gogebic Community College	Ironwood	P
Grand Rapids Junior College	Grand Rapids	P
Lake Michigan College	Benton Harbor	P

TABLE 4a (Cont'd.)

Minnesota		
University of Minnesota	Crookston	P
Mississippi		
Northeast Mississippi Junior College	Booneville	P
Missouri		
Crowder College	Neosho	P
Missouri Baptist College	Hanibal	CR
Nebraska		
North Platte Junior College	North Platte	P
Nevada		
Elko Community College	Elko	P
New Jersey		
Brookdale Community College	Lincroft	P
Luther College of the Bible & Liberal Arts	Teaneck	I
Ocean County College	Toms River	P
Somerset County College	North Branch	P
New York		
Academy of Aeronautics	Flushing	I
Paul Smith's College of Arts & Sciences	Paul Smiths	I
SUNY Agricultural & Technical College	Canton	P
North Carolina		
Cleveland Co. Technical Institute	Shelby	P
Louisburg College	Louisburg	CR
Pamlico Technical Institute	Alliance	P
W. W. Holding Technical Institute	Raleigh	P
Wilkes Community College	Wilkesboro	P
Wingate College	Wingate	CR
Kittrell College	Kittrell	CR

TABLE 4a (Cont'd.)

Ohio		
Cuyahoga Community College	Parma	P
University of Akron Community & Technical College	Akron	P
Oklahoma		
El Reno Junior College	El Reno	P
Northern Oklahoma College	Tonkawa	P
Poteau Community College	Poteau	P
Oregon		
Mt. Hood Community College	Gresham	P
Treasure Valley Community College	Ontario	P
Pennsylvania		
Bucks County Community College	Newtown	P
Community College of Allegheny County--South Campus	West Mifflin	P
Mount Aloysius Junior College	Cresson	CR
Northampton County Area Community College	Bethlehem	P
South Carolina		
Spartanburg Junior College	Spartanburg	CR
South Dakota		
Presentation College	Aberdeen	CR
Tennessee		
Cleveland State Community College	Cleveland	P
Cumberland College of Tennessee	Lebanon	I
Freed Hardeman College	Henderson	CR
Motlow State Community College	Tullahoma	P
Texas		
Amarillo College	Amarillo	P
Frank Phillips College	Borger	P
Grayson County College	Dennison	P
Paris Junior College	Paris	P
San Antonio College	San Antonio	P
Southwest Texas Junior College	Uvalde	P

TABLE 4a (Cont'd.)

Utah		
Snow College	Ephraim	P
Virginia		
Danville Community College	Danville	P
Wytheville Community College	Wytheville	P
Washington		
Big Bend Community College	Moses Lake	P
Spokane Community College	Spokane	P
Wenatchee Valley College	Wenatchee	P
Wisconsin		
Western Wisconsin Technical Institute	La Grosse	P

responding to our requests for assistance is essential and we hesitate to impose any burdens that might damage this goodwill...The faculty and the students are becoming very sensitive about the confidentiality of questionnaires...."

Table 5a demonstrates that the turndowns are well distributed geographically.

TABLE 5a.--DISTRIBUTION OF TURNDOWNS BY REGION AND INSTITUTIONAL STATUS

	REGIONS								
	I	II	III	IV	V	VI	Church Related	Independent	Total
Number of Refusals	2	3	3	3	2	2	3	3	21
Number in Sample	9	15	14	6	17	9	13	9	92

No one geographic region dominates. As indicated, all replacements were selected from the sample cells on a random basis. Three institutions failed to advise us before the cut-off date of March 26 of their inability to participate and therefore were not replaced.

Student Sample Selection

The presidents who agreed to participate in Project Focus were asked to appoint a member of their staff to coordinate the Project Focus activities with their respective institutions. The campus coordinators were first informed verbally and then in writing (see Exhibit II) as to the sample selection procedures and administering the questionnaires. One of the tasks of the campus coordinator was to select a student sample and then to administer the student questionnaire (see Exhibit III) to this sample.

Campus coordinators were instructed to use the following formula for determining the number of students to be chosen for participation in this study:

If you have less than 1,000 full-time students, survey 100 (if less than 100 students, survey all).

If you have between 1,000 but less than 10,000 full-time students, survey 10 percent.

If you have 10,000 or more full-time students, survey five percent.

Although the stratification of the institutions was based upon full- and part-time enrollment, the number of students chosen for the sample were to be based on the number of full-time students (not the full-time equivalent figure commonly used at community-junior colleges) enrolled during the term in which the assessment was to occur. Each college was allowed to define "full-time student" in its own way.

Although several procedures were outlined for sampling the students (see Exhibit II) the only prerequisite was that the students be randomly chosen. It was also recommended to the campus coordinators that the ratio of freshmen to sophomores at their respective institutions be reflected in their samples.

The coordinators were permitted to administer the questionnaires in any one of three ways: (1) using the class time of randomly chosen classes or classes that were required of all students; (2) bringing together the students in special scheduled group sessions; or (3) distributing the questionnaires by mail. Option #1 proved to be the most popular alternative.

Faculty Sample Selection

The campus coordinators were also responsible for selecting the faculty sample. The faculty sample was selected by means of the following formula:

If you have less than 500 full-time faculty members, survey 50 (if less than 50 faculty, survey all).

If you have more than 500 full-time faculty members, survey 10 percent.

The number of faculty members were to be based on the number of full-time, certified faculty members, plus academic administrators who teach such as deans and department chairmen. A college was allowed to use its own

definition of a "full-time faculty member." Names were selected from alphabetical listings in the proportion desired. The questionnaires were to be distributed to the faculty by campus mail and returned to the coordinator in sealed envelopes.

Weighting Procedure

When performing sample surveys, weights are often required to make appropriate estimates of population parameters from the data obtained in the survey sample. Due to the rapidly changing composition of the population and the slightly less than 100 percent response rate to the questionnaires, the application of weights became a necessity. The weighting scheme utilized was developed in the Cooperative Institutional Research Program of the American Council on Education.*

Four types of weights, enumerated in Creager's paper, were utilized. These weights can best be illustrated by the following hypothetical example: First, let us assume that the following ground rules apply:

(a) The population is divided into two strata only, with one stratum consisting of four institutions and the other of six institutions.

(b) Only two institutions will be sampled in each stratum.

(c) The number of faculty at each institution are given in the following table:

Stratum 1		Stratum 2		
a:25	b:50	e:50	f:100	g:100
c:100	d:125	h:100	i:25	j:45

The four underlined institutions (a, b, f, and h) are the ones sampled.

(d) The institutions are referred to as the primary sampling units (p.s.u.'s) and the faculty members as the secondary sampling units (s.s.u.'s)

(e) The participation rates or ratios in the four selected s.s.u.'s are--a:20/25, b:30/50, f:65/100, and h:85/100.

The weights utilized throughout the study were arrived at in the following way:

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* Astin, A. W., Panos, R. J., and Creager, J. A., "A Program of Longitudinal Research on the Higher Educational System," ACE Research Reports, 1966, 1(1). See also John A. Creager, "Fortran Programs Providing Weights in Survey Designs Using Stratified Samples," Educational and Psychological Measurement, 1969, pp. 29, 709-712.

Type I Weights

Type I weight is utilized to insure that each stratum of the population is adequately represented by the sample. Type I, or institutional cell weights, are computed for each cell as the ratio of the sum of within-institution data units across the population institutions in that cell to the sum of the within-institution data across the sample institutions in that cell. In case of the hypothetical example, the within-institution data units are the faculty members. Thus, the ratio of the population data units to the within-institution data units for the two strata, or cells, are

Stratum 1: 300/75 = 4.0
Stratum 2: 420/200 = 2.1

These weights, of course, are identical for all sampled institutions in a given stratification cell. Thus Type I weights are designed to correct for inadequate cell or stratum representation.

Type II Weights

The Type I weights above are sufficient if the participation rates are 100 percent. If they are not 100 percent (say, for instance, not all of the faculty respond to the questionnaires), Type II weights are necessitated. They are similar to Type I weights, with the exception that individual institutions are considered rather than entire cells, as strata. Type II weights are simply the total number of s.s.u.'s per institution divided by the number of s.s.u.'s in that institution that were included in the sample. In case of the hypothetical example, the Type II weights are

a: 25/20,
b: 50/30,
f: 100/65,
h: 100/85.

Note that these weights are merely the inverses of the s.s.u. sampling fractions.

Whereas Type I weights adjusted for inadequate cell or stratum representation, Type II weight corrects for random deviation from 100 percent participation of data units within an institution.

Type III Weights

The third type of weights are merely the products of Type I and II weights. Thus, a: 4.0(1.25), b: 4.0(1.67), c: 2.1(1.54), and h: 2.1(1.18). These weights are normally applied to subsequent processing of data records developed from the within-institution sampling units.

Type IV Weights

These are institutional weights, appropriate for subsequent processing of institutional unit or summary data. Type IV weights differ from Type III in that the resulting estimator is in terms of p.s.u.'s instead of s.s.u.'s. They are computed for each cell and stratum as the ratio of the number of population institutions to the number of sample institutions in that cell.

For example:

Stratum 1: 4/2 = 2
Stratum 2: 6/2 = 3

Theoretical Justification of the Above Weights

The estimators of the population mean and total when stratified sampling is employed are as follows:

population mean $\bar{y}_{st} = \sum_{h=1}^{L} \frac{N_h \bar{y}_h}{N} = \frac{\hat{Y}_{st}}{N}$

and total $\hat{Y}_{st} = \sum_{h=1}^{L} N_h \bar{Y}_h$

where h = 1, 2, ..., L = the number of strata
N_h = the size of the h^{th} stratum
$\bar{Y}_h$ = the sample mean of the h^{th} stratum
and
$N = \sum_{h=1}^{L} N_h$ = the total population size

Note that $\hat{Y}_{st}$ may be expressed as follows:

$$Y_{st} = \sum_{h=1}^{L} N_h \bar{y}_h$$

$$= \sum_{h=1}^{L} N_h \sum_{i=1}^{n_h} \frac{y_{hi}}{n_h}$$ (n_h is the sample size in the h^{th} stratum)

$$= \sum_{h=1}^{L} \frac{N_h}{n_h} \sum_{i=1}^{n_h} y_{hi}$$

$$= \sum_{h=1}^{L} W_h \sum_{i=1}^{n_h} y_{hi} = \sum_{h=1}^{L} W_h y_h$$

where the W_h's are the general expressions for the weights developed above.

To illustrate the use of these formulas, consider first the situation of interest only in the p.s.u.'s. This is the situation represented by weights of Type IV. In this case, as illustrated above,

$N_1 = 4$ $N_2 = 6$

$n_1 = 2$ $n_2 = 2$

Thus $Y_{st} = 2 y_1. + 3 y_2.$

Now assume that we desire the variables to be expressed in terms of the faculty members, s.s.u.'s. If the participation rates at the selected institution were 100 percent:

$$\hat{Y}_{st} = 4.0\, y_{1\cdot} + 2.1 y_{2\cdot} \qquad (1)$$

If the participation rates were less than 100 percent, we would be forced to utilize weights of Type III. Then, for example,

$$\hat{Y}_{st} = 4.0\,(25/20\, y_{11\cdot} + 50/30\, y_{12\cdot}) + 2.1\,(100/65\, y_{21\cdot} + 100/85\, y_{22\cdot}) \qquad (2)$$

In the above formula,

$y_{11\cdot}$ = the total of the sampled elements in the first selected institution of the first stratum.

Similarly,

$y_{12\cdot}$ = second institution, first stratum,

$y_{21\cdot}$ = first institution, second stratum,

$y_{22\cdot}$ = second institution, second stratum.

Note that these Type III weights reduce to Type I weights if participation is complete. That is, equations (1) and (2) are then identical.

Variance of Stratified Estimators

The general expression for the estimated variance of Y_{st} is

$$\sum_{h=1}^{L} N_h^2 \frac{s_h^2}{n_h} \left(1 - \frac{n_h}{N_h}\right)$$

where $s_h^2 = \sum_{i=1}^{n_h} \frac{(y_{hi} - \bar{y}_h)^2}{n_h - 1}$

$$= \frac{\sum_{i=1}^{n_h} y_{hi}^2 - \frac{(\sum_{i=1}^{n_h} y_{hi})^2}{n_h}}{n_h - 1}$$

Data Collection Procedures

Four types of survey instruments were utilized: (1) community and junior college presidents' questionnaires; (2) institutional or coordinators' questionnaires; (3) student questionnaires; (4) faculty questionnaires. See Exhibits IV, V, VI, and VII for examples of each questionnaire.

These survey instruments were mailed to the sample institutions by American College Testing Program in Iowa City shortly after March 26, 1971.* The presidents' questionnaires were sent directly to the presidents. The other survey instruments were all sent to the campus coordinators for distribution to the respective parties, i.e., themselves, the student sample, and the faculty sample. The campus coordinators were given the responsibility to administer and return the student, faculty, and coordinator questionnaires. The procedure for their return is spelled out in Exhibit II. After the initial surge at response by many institutions in one sample, telephone calls were made to the non-respondent campus coordinator and the college presidents urging them to complete and return their questionnaires as soon as possible. A second mailing to non-respondent presidents were made in April 1971. July 30, 1971 was established as a final cut-off date for mailing in all questionnaires.

Response Rates

The response rate to the presidents' questionnaire was near perfect--98 percent. Ninety out of the 92 presidents who had agreed to participate in Project Focus did so by completing their questionnaires. The response rate to the institutional questionnaire, filled out by the campus coordinator, was 75 percent--a respectably sized sample in its own right. Fifty-one of the 70 public two-year college coordinators responded. In both cases, several telephone calls were made to the respective parties encouraging their questionnaire completion. While no systematic study of non-respondent coordinators was conducted, explanations provided through telephone contact can largely be summarized as either the data was unavailable or those having the needed information were unwilling to cooperate. In a few cases, the person assigned by the president to the task felt unqualified to complete it.

Student and faculty responses were aggregated at the institutional level. The response rate and resultant weights were determined as the ratio of complete respondents to the sample chosen at each institution. Table 6 presents the detailed breakdown for each institution. For each institution the following information is given: (1) size of student sample chosen, (2) number of student respondents, (3) percent of student response / ratio of (1) to (2)/ , (4) size of faculty sample chosen, (5) number of faculty respondents, and (6) percent of faculty response.

We arbitrarily decided in advance to include in the study only those sets of students or faculty whose response rate was higher than 75 percent. However, this criteria was modified to include a number of institutions, mainly larger ones, which otherwise would have been eliminated from the analysis or were needed for adequate representation in each cell. In these instances, the response rate could be no lower than 50 percent. These institutions are identified by an asterisk.

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* Throughout the study, ACT provided assistance in regards to questionnaire design and development, survey instrument distribution and collection, and data computerization and analysis.

A special questionnaire (see Exhibit VII) was sent to the campus coordinators after they had already administered the student and faculty questionnaires to determine the size of the student and faculty samples which they had chosen. In cases of no response to this questionnaire, a telephone call was made and the needed information obtained. This questionnaire also incorporated questions on sampling procedure and how they went about administering the questionnaire.

Of those institutions included in the final analysis, the total number of students sampled is 12022; the total number of usable student respondents is 10290, yielding a response rate of 85.6 percent. The total number of faculty sampled is 2741; the total amount of usable faculty respondents is 2491, yielding a response rate of 90.9 Due to the acceptable response rate by both students and faculty, no special study of non-respondents was conducted.

TABLE 6.--STUDENT AND FACULTY RESPONSE

Institution	Stud.Samp. Chosen	Student Respondents	Student Resp.Rate	Fac.Samp. Chosen	Faculty Respondents	Fac.Resp. Rate
#1.	110	110	100.0%	21	16	76.2%
2.	145	131	90.3	49	48	98.0
3.	150	124	82.7	54	42	77.8
4.	179	176	98.3	40	40	100.0
5.	120	91	75.8	—	—	—
6.	100	100	100.0	37	35	94.6
7.	129	126	97.7	60	59	98.3
8.	100	97	97.0	55	51	92.7
9.	800	659	82.4	40	37	92.5
10.	111	107	96.4	47	42	89.4
11.	161	161	100.0	59	57	96.6
12.	300	232	77.3	60	54	90.0
13.	103	101	98.1	30	30	100.0
14.	100	100	100.0	41	39	95.1
15.	110	96	87.3	56	51	91.1
16.	115	108	93.9	33	31	93.9
17.	100	88	88.0	30	30	100.0
18.	146	90	61.6*	50	48	96.0
19.	116	116	00.0	34	32	94.1
20.	107	78	72.9*	—	—	—
21.	128	102	79.7	50	43	86.0
22.	204	105	51.5*	49	41	83.7
23.	130	102	78.5	10	8	80.0
24.	107	107	100.0	47	40	85.1
25.	100	83	83.0	—	—	—
26.	129	118	91.5	64	64	100.0
27.	200	196	98.0	49	39	79.6
28.	154	154	100.0	49	49	100.0
29.	101	101	100.0	40	40	100.0
30.	125	85	68.0*	60	56	93.3
31.	100	80	80.0	—	—	—
32.	113	100	88.5	14	14	100.0
33.	160	145	90.6	—	—	—
34.	102	96	94.1	47	47	100.0
35.	162	104	64.2*	—	—	—
36.	142	127	89.4	47	44	93.6
37.	66	66	100.0	5	4	80.0
38.	163	161	98.8	63	48	76.2
39.	90	76	84.4	11	8	72.7*
40.	108	108	100.0	19	18	94.7
41.	102	102	100.0	28	24	85.7
42.	100	95	95.0	—	—	—
43.	100	98	98.0	50	48	96.0
44.	100	95	95.0	49	49	100.0
45.	110	102	92.7	32	30	93.8
46.	140	88	62.9*	49	47	95.9

Institution	Stud.Samp. Chosen	Student Respondents	Student Resp.Rate	Fac.Samp. Chosen	Faculty Respond.	Fac.Resp. Rate
#47.	100	76	76.0%	39	32	82.1%
48.	142	142	100.0	—	—	——
49.	452	400	88.5	44	34	77.3
50.	122	101	82.8	12	12	100.0
51.	100	100	100.0	26	26	100.0
52.	100	78	78.0	30	23	76.7
53.	120	103	85.8	24	23	95.8
54.	107	106	99.1	24	24	100.0
55.	124	122	98.4	49	47	95.9
56.	103	103	100.0	33	33	100.0
57.	128	128	100.0	—	—	——
58.	100	82	82.0	53	53	100.0
59.	143	137	95.8	48	36	75.0
60.	55	55	100.0	—	—	——
61.	191	162	84.8	50	47	94.0
62.	448	271	60.5*	53	51	96.2
63.	100	100	100.0	29	29	100.0
64.	103	94	91.3	49	37	75.5
65.	100	98	98.0	50	42	84.0
66.	560	512	91.4	58	50	86.2
67.	1125	754	67.0*	44	44	100.0
68.	266	258	97.0	—	—	——
69.	130	112	86.2	16	16	100.0
70.	98	96	98.0	26	26	100.0
71.	355	301	84.8	59	49	83.1
72.	112	112	100.0	13	11	84.6
73.	---	---	----	—	—	——
74.	---	---	----	11	11	100.0
75.	---	---	----	40	39	97.5
76.	---	---	----	66	56	84.8
77.	---	---	----	40	33	82.5
78.	---	---	----	48	40	83.3
79.	---	---	----	49	43	87.8
80.	---	---	----	—	—	——
81.	---	---	----	—	—	——
82.	---	---	----	30	21	70.0*
83.	---	---	----	--	--	----
84.	---	---	----	--	--	----
85.	---	---	----	--	--	----
86.	---	---	----	--	--	----
87.	---	---	----	--	--	----
88.	---	---	----	--	--	----
89.	---	---	----	--	--	----
90.	---	---	----	--	--	----
91.	---	---	----	--	--	----
92.	---	---	----	--	--	----

Ledger

—— Excluded from study due to insufficient response (less than 75 percent).
---- Excluded from study due to no returns at all.
* Institutions, mainly large ones, included in the study with less than 75 percent response rate to allow adequate representation in each cell.

APPENDIX B

Innovative Institutions

One of the efforts of this study was to rank order the institutions by their degree of "innovativeness." "Innovativeness" was defined as the willingness of an institution to adopt new techniques either in the area of college administration or teaching methods.

Operationally, the following method was employed to rank the institutions. Dr. Gleazer, who visited 21 of the institutions with completed presidents' questionnaires, was asked to rate the "innovativeness" of these institutions in terms of his perception of their willingness to change. The scale was from 1 to 4, with 1 being highly innovative and 4 not innovative at all.

It was hypothesized that Questions 5 6,7,9,11, and 15 of the presidents' questionnaire could be used to predict Dr. Gleazer's evaluation of the innovativeness of the 21 schools. The questions used were as follows:

Question #15

(a) Delete "u", leaving 20 possible entries.

(b) Establish scale as follows:

100 points ←	→ 20 points
Not versatile at all in regards to teaching methods and administrative procedures.	Highly versatile in regards to teaching methods and administrative procedures.

Questions #5, 8, and 9

(a) Yes--1 point (b) No--4 points

Questions #6

(a) If yes, 7 to 9 checked, 1 point
4 to 6 checked, 2 points
1 to 3 checked, 3 points

(b) If no, 4 points

Question #11

(a) Yes--1 point
(b) In process--2 points
(c) Anticipate doing so--3 points
(d) Do not anticipate doing so--4 points

It was anticipated that Dr. Gleazer's evaluation = $\mathcal{f}$ New teaching practices (#15), change agent at institution (#9), communication linkup with other institutions (#5), having PPB System at institution (#11), having budget for research and development (#8), and faculty training programs (#6).

A step-wise regression analysis was applied. Having entered all the variables, the multiple correlation coefficient was determined to be 0.813. However, questions #11,8, and 6 did not contribute significantly to predicting Dr. Gleazer's evaluations. Using only questions #15,9, and 5, the multiple correlation coefficient was 0.804.

The summary statistics were the following:

Multiple Correlation Coefficient.....	0 804	(Adjusted R = 0.779)
F for analysis of Variable (D.F. = 3.17)...	10.354	
Standard Error of Estimate.....	0.745	(Adjusted SE = 0.785)

VARIABLE	REGULAR COEFFICIENT	STD.ERROR COEF.	COMPUTED T	BETA COEF.
#9	0.38546	0.14362	2.684	0.50779
#5	0.23254	0.11654	1.995	0.30915
#15	0.02500	0.01963	1.273	0.25344
INTERCEPT	-0.04191			

Thus, the formula for determining the degree of innovativeness is--

Degree of innovativeness = -0.04191 + 0.38546 (#9) + 0.23254 (#5)

+ 0.02500 (#15).

APPENDIX C

PRESIDENTS' PERCEPTIONS OF GOALS FOR THE 70's

Goal	Output or Process Goal	Public				Private			
		Present		Preferred		Present		Preferred	
		Rank	$\bar{X}$	Rank	$\bar{X}$	Rank	$\bar{X}$	Rank	$\bar{X}$
Serve higher education needs of youth from local community	O	1	1.23	1	1.13	4	1.95	10	1.75
Respond to needs of local community	O	2	1.62	2	1.23	11	2.45	12	1.85
Encourage mutual trust and respect among faculty, students, and administrators	P	3	1.71	4	1.29	1	1.70	1	1.15
Make financial assistance available to any academically qualified student	P	4	1.74	6	1.34	8	2.20	7	1.60
Provide educational opportunities for adults in the local area	P	5	1.83	8	1.36	20	3.10	14	2.11
Establish and define institutional purposes	P	6	1.83	5	1.31	2	1.75	2	1.15
Provide wide range of opportunities for specific occupational preparation	P	7	1.97	12	1.49	18	2.95	21	2.50
Help students respect own abilities and limitations	O	8	2.01	11	1.41	3	1.80	5	1.32
Help students adapt to new occupational requirements	O	9	2.04	3	1.27	10	2.45	13	1.90

APPENDIX C continued

Goal	Output or Process Goal	Public				Private			
		Present		Preferred		Present		Preferred	
		Rank	$\bar{X}$	Rank	$\bar{X}$	Rank	$\bar{X}$	Rank	$\bar{X}$
Maintain an atmosphere of intellectual excitement on campus	P	10	2.04	10	1.39	6	2.05	4	1.20
Make financial assistance available to any student who wants to enroll	P	11	2.07	13	1.57	15	2.70	19	2.37
Provide some form of education for any student regardless of academic ability	P	12	2.14	14	1.64	21	3.10	24	2.70
Ensure faculty participation in institution decision making	P	13	2.19	19	1.94	9	2.35	9	1.75
Provide for curricular and instructional evaluation	P	14	2.32	7	1.35	7	2.15	6	1.40
Experiment with new forms of instruction	P	15	2.36	15	1.69	12	2.50	8	1.75
Re-educate and retrain those whose vocational capabilities are obsolete	O	16	2.43	9	1.38	25	3.75	22	2.52
Develop programs for the special student, e.g., disadvantaged, bright, foreign	P	17	2.53	18	1.73	19	3.00	18	2.35
Encourage students to undertake self-directed study	O	18	2.54	16	1.69	14	2.68	11	1.84
Ensure student participation in institutional decision making	P	19	2.57	22	2.17	13	2.65	15	2.20

APPENDIX C continued

Goal	Output or Process Goal	Public				Private			
		Present		Preferred		Present		Preferred	
		Rank	$\bar{X}$	Rank	$\bar{X}$	Rank	$\bar{X}$	Rank	$\bar{X}$
Increase number and diversity of sources of income	P	20	2.59	17	1.69	5	1.95	3	1.15
Attract representative number of minority faculty members	P	21	2.74	23	2.26	23.5	3.55	23	2.65
Permit student wide latitude in course selection	P	22	2.86	21	2.10	17	2.85	17	2.30
Help solve social, economic or political problems in the immediate geographical area	O	23	3.03	24	2.29	22	3.32	20	2.44
Help formulate programs in a number of public policy areas, e.g., pollution control	O	24	3.04	20	2.03	23.5	3.55	25	2.75
Allocate % of enrollment for minority groups or those of low socio-economic status	P	25	3.64	25	3.30	26	4.00	26	3.32
Strengthen religious faith of students	O	26	4.09	26	3.71	16	2.80	16	2.25

APPENDIX C continued

FACULTY PERCEPTIONS OF GOALS FOR THE 70's

Goal	Public				Private			
	Present		Preferred		Present		Preferred	
	Rank	$\bar{X}$	Rank	$\bar{X}$	Rank	$\bar{X}$	Rank	$\bar{X}$
Serve higher education needs of youth from local community	1	1.60	2	1.41	3	2.28	4	1.85
Provide some form of education for any student regardless of academic ability	2	1.64	7	1.74	2	2.28	9	2.35
Respond to needs of local community	3	1.93	4	1.52	7	2.58	5	2.00
Help students adapt to new occupational requirements	4	2.08	3	1.44	6	2.53	3	1.77
Make financial assistance available to any student who wants to enroll	5	2.20	9	1.86	5	2.44	6	2.12
Help students respect own abilities and limitations	6	2.25	1	1.40	1	2.14	1	1.35
Re-educate and retrain those whose vocational capabilities are obsolete	7	2.30	5	1.54	11	3.64	10	2.45
Ensure faculty participation in institution decision making	8	2.60	6	1.61	4	2.37	2	1.66
Attract representative number of minority faculty members	9	2.82	11	2.47	12	3.66	11	2.71
Ensure student participation in institutional decision making	10	2.86	10	2.31	8	2.71	8	2.23
Help formulate programs in a number of public policy areas, e.g., pollution control	11	2.90	8	1.83	9	3.15	7	2.20
Allocate % of enrollment for minority groups or those of low socioeconomic status	12	3.10	12	2.80	10	3.33	12	2.93

EXHIBIT I

project focus
strategies for change

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Area Code 202/833-1177

Edmund J. Gleazer, Jr.
Project Director
David S. Bushnell
Research Director
Francis C. Pray
Associate

January 22, 1971

Dr. Robert Smith, President
Every Man's Junior College
Pine Street
Philadelphia, Pennsylvania 19102

Dear Dr. Smith:

As you may be aware, the A.A.J.C., with support from the W. K. Kellogg Foundation, has undertaken to study in what ways community and junior colleges will be and should be changing during the next five to ten years. To accomplish this purpose, we have drawn up a stratified random sample of institutions whose goals and programs we would like to study. Your institution was one of those chosen for participation in the study. Responses to our information items will become part of a larger data bank of information. Since we are not interested in evaluating individuals or single institutions, all information will be pooled and dealt with in an aggregate manner.

Please fill out the attached postcard and return it to our office as soon as possible (no later than February 5, 1971). If you agree to participate in this undertaking, you will receive shortly after receipt or the postcard a package of materials containing four separate sets of questionnaires. The first consists of a questionnaire for your personal response and will take about 25 minutes. The second is a questionnaire directed at gathering information on your present mix of students, financial resources, and other factual information. To complete this questionnaire will take approximately one man day of effort. The third and fourth questionnaires are to be administered to a randomly chosen sample of college students and faculty members. This instrument has been developed by The American College Testing Program and is designed to obtain the opinions of students and faculty members towards the goals and practices of your institution. A brochure describing the Institutional Self-Study Service Program is enclosed. Each institution will be provided an Institutional Self-Study Report which summarizes student and faculty views of selected aspects of your college. The report will summarize student and faculty feelings about selected aspects of the college and the effectiveness of its programs. In addition to this ISS report, you will be receiving at the end of the project a copy of the final report prepared by the Project Focus staff.

A National Study by the American Association of Junior Colleges under a Grant from the W. K. Kellogg Foundation.

Since it would be helpful to us to have someone on your staff assist us in scheduling students and faculty members for completion of the ACT questionnaire, would you please identify that individual by writing his name on the attached postcard. We also need to know when you winter term begins in order to coordinate our mailing of materials approximately one week following the opening of your new term.

We look forward to working and sharing with you the benefits which may come from this project to the community college field.

Cordially yours,

Edmund J. Gleazer, Jr.
Project Director

EJG/mm

Enclosures

Please detach and return to us before February 5, 1971, the bottom portion of this card with the following information:

1. Your willingness to participate in the Project Focus study.
2. The names of a coordinator with whom we can work during the span of the study.
3. The date your Winter Term or Second Semester begins.

Thank you.

February _____, 1971

Dear Dr. Gleazer:

1. _____Our college will be happy to participate in your project. I have assigned (print) _____ _____, (title) _____ _____, as liaison between you and your staff and our college. We will be waiting for further instructions. Our Winter Term (or Second Semester) begins _____, 1971.

2. _____Regretfully our college will not be able to take part in your project.

Sincerely,

_____
President

PROJECT FOCUS: STRATEGIES FOR CHANGE
Madison Office Building, Suite 600
1155 - 15th Street, N.W.
Washington, D. C. 20005

project focus
strategies for change

Madison Office Building
Suite 600
1155 15th Street, N.W.
Washington, D.C. 20005
Area Code 202/833-1177
Edmund J. Gleazer, Jr.
Project Director
David S. Bushnell
Research Director
Francis C. Pray
Associate

College Code: 3650

February 12, 1971

Dr. Robert Smith, President
Every Man's Junior College
Pine Street
Philadelphia, Pennsylvania 19102

Dear Dr. Smith:

Approximately 2 weeks ago I wrote you to invite your participation in a nationwide research program about and for community and junior colleges. Since I have not heard from you, and it is very important to have your institution participate, I am writing you again.

There are a number of documents enclosed which generally describe the research program and the instruments to be used. If you have any additional questions, please call our Research Director, Mr. David Bushnell.

Two questions which might occur to you are:

1. What is this going to cost?
2. What will be our payoff?

The first question is easy to answer. The cost to you will be: (a) the time it takes for one of your staff to act as the campus coordinator for the study and (b) about 30 minutes time of per cent of your students and faculty members.

The second question is equally easy to answer. First, the results of the study will be widely published and should give considerable assistance in guiding policy decisions in this national movement. Secondly, you will receive a report of your students' and faculty members' responses to the Institutional Self-Study Questionnaire. The report is a valuable mode of feedback to the institution about student and faculty perceptions of it. In addition, the report has proven to be a ready source for reports to

A National Study by the American Association of Junior Colleges under a Grant from the W. K. Kellogg Foundation.

boards of trustees and advisory committees. Equally important, however, accrediting agencies have expressed keen interest in the report as a part of your institution's self-evaluation. All in all, participating will be rewarding for you, your institution, AAJC, and community and junior colleges across the country.

Obviously, our study cannot reach a successful conclusion unless you choose to participate. Please complete the enclosed postcard (prestamped and addressed) and return it to us as soon as possible. Please note that the return date no longer applies.

Sincerely,

E. J. Gleazer
Project Director

EJG/mm

Enclosure

project focus
strategies for change

Madison Office Building
Suite 600
1155 15th Street, N.W.
Washington, D.C. 20005
Area Code 202/833-1177

Edmund J. Gleazer, Jr.
Project Director
David S. Bushnell
Research Director
Francis C. Pray
Associate

February 20, 1971

Dear President:

I was pleased to learn of your willingness to participate in Project Focus. As mentioned in my earlier letter, there will be four responsibilities which we would like you to perform. The first will be to complete a President's Questionnaire to be mailed within a week. The second will be to complete an institutional questionnaire. The third will be to draw a per cent random sample of students and administer to them a brief questionnaire designed by the American College Testing Program as part of their Institutional Self-study Service. The fourth questionnaire will be administered to a random sample of faculty members whose backgrounds and perceptions of the institution's goals and practices will be obtained through this method.

Because of the complexity of the procedures involved in drawing a random sample, we would like to invite you to a briefing to be held at the forthcoming American Association of Junior Colleges Convention in Washington, D. C. The meeting is scheduled for 11:00 a.m. on Monday, March 1, in the Cabinet Room of the Washington Hilton Hotel. During the meeting, we will be able to discuss the procedures to be employed in the structuring of a reliable random sample. It will also provide you with an opportunity to review the four questionnaires and to raise any questions regarding the interpretation or meaning of questions included in each of the four instruments.

Should you be unable to attend that meeting, we will plan to contact you by telephone during the week of March 1. Our primary purpose will be to determine what number of questionnaires you will need to have sent to you. Please return the enclosed postcard as soon as possible indicating when you might be available. We will then try to contact you by telephone at that designated time. We look forward to meeting you in person or talking with you by phone in the near future.

Cordially yours,

Edmund J. Gleazer, Jr.
Project Director

DSB:bjw

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EXHIBIT II

project focus
strategies for change

Madison Office Building
Suite 600
1155 15th Street, N.W.
Washington, D.C. 20005
Area Code 202/833-1177
Edmund J. Gleazer, Jr.
Project Director
David S. Bushnell
Research Director
Francis C. Pray
Associate

February 20, 1971

Dear Coordinator:

I was happy to learn of your appointment as coordinator for the Project Focus study. As mentioned in my earlier letter, there will be three responsibilities which we would like to ask you to perform. The first will be to complete an institutional questionnaire which will be in the mail to you shortly. The second will be to draw a per cent (depending on size of enrollment) random sample of students and administer to them a brief questionnaire designed by the American College Testing Program as part of their Institutional Self-study Service. The third questionnaire will be administered to a random sample of faculty members whose backgrounds and perceptions of the institution's goals and practices will be obtained through this method.

Because of the complexity of the procedures involved in drawing a random sample, we would like to invite you to a briefing to be held at the forthcoming American Association of Junior Colleges Convention in Washington, D. C. The meeting is scheduled for 11:00 a.m. on Monday, March 1, in the Cabinet Room of the Washington Hilton Hotel. During the meeting, we will be able to discuss the procedures to be employed in the structuring of a reliable random sample. It will also provide you with an opportunity to review the three questionnaires and to raise any questions regarding the interpretation or meaning of questions included in each of the three instruments.

Should you be unable to attend that meeting, we will plan to contact you by telephone during the week of March 1. Our primary purpose will be to determine what number of questionnaires you will need to have sent to you. Please return the enclosed postcard as soon as possible indicating when you might be available. We will then try to contact you by telephone at that designated time. We look forward to meeting you in person or talking with you by phone in the near future.

Cordially yours,

Edmund J. Gleazer, Jr.
Project Director

DSB:bjw

A National Study by the American Association of Junior Colleges under a Grant from the W. K. Kellogg Foundation.

March 9, 1971

Dear Colleague:

Mr. David Bushnell has instructed me to forward some materials to you in conjunction with your participation in Project Focus. Listed below are the names of the items:

1) The Faculty Questionnaire
2) The Institutional Questionnaire
3) The Institutional Self-Service Manual: Part 1
4) The Institutional Self-Service Manual: Part 2
5) The Institutional Self-Study Service Survey: College Student Form
6) The Institutional Self-Study Survey answer sheet
7) Two copies of a Press Release
8) The Student Instruction Sheet
9) The Student Form Supplement
10) A Sampling Guide
11) An Assessment and Return of Materials Guide.

Items 3, 10, and 11 are enclosed. Items 1 and 2 will be mailed under separate cover in approximately 1 week. Item 4 will be returned with your Institutional Self-Study Service Report (report of results of survey for your college). The remaining items will be sent under separate cover within a couple of days. The volume of materials of Items 1, 5, 6, 8, and 9 will correspond to approximately 20% more than you indicated you needed. If your supply will be insufficient, please call me at once.

The purpose of the sampling and assessment guides is to suggest ways of sampling and surveying your students and faculty members. You should proceed with the sampling and making assessment arrangements for the students before you receive materials.

Your student assessment materials will arrive within 2 weeks and 4 days of the date of this letter.

Sincerely,

Philip R. Rever, Assistant Director
Research Services
Research and Development Division

Enclosures

THE AMERICAN COLLEGE TESTING PROGRAM

March 18, 1971

Dear Campus Coordinator:

Under separate cover I have forwarded the second of 2 shipments of materials in conjunction with your participation in Project Focus.

The second shipment consists of Faculty Questionnaires in the quantity stated on the invoice you received with the earlier shipment.

When you distribute the Faculty Questionnaires, please be sure to enclose an ISS answer sheet. There should be a sufficient quantity of answer sheets with the first shipment to meet your needs.

After you have received all the ISS answer sheets for both students and faculty members, place them in an envelope along with the green Information Form (be sure to complete Items 1, 2, 3, and 7 on the form) and mail to ISS Scoring Service, 1110 Morse Road, Columbus, Ohio 43229.

Enclosed please find an Institutional Questionnaire. If you have not already done so, please complete the questionnaire at your earliest convenience and return it to me.

Sincerely,

Philip R. Rever, Assistant Director
Research Services
Research and Development Division

PRR/mm

Enclosure

Corporate Headquarters P. O. BOX 168, IOWA CITY, IOWA 52240 / PHONE (319) 351-4470

March 1971

Sampling Guide

Here are the rules for determining how many students and faculty members at your college will be asked to participate in the study:

1. Students:
   If you have less than 1,000 students, survey 100 (if less than 100 students, survey all).
   If you have between 1,000 but less than 10,000 students, survey 10%.
   If you have 10,000 or more students, survey 5%.

2. Faculty:
   If you have less than 500 faculty members, survey 50 (if less than 50 faculty, survey all).
   If you have more than 500 faculty members, survey 10%.

The number of students is based on the number of full-time students (not the full-time equivalent figure commonly used at community and junior colleges) enrolled during the term in which the assessment is to occur. The definition of full-time student should correspond to your college's definition.

The number of faculty members is based on the number of full-time, certified faculty members, plus academic administrators who teach such as deans and department chairmen. Again, full time should be defined according to the college's definition.

Sampling faculty members. The procedures outlined on pages 43-44 of the Institutional Self-Study Service Manual: Part 1 under "Systematic Sampling" should be used to draw your sample of faculty members.

Sampling students. There are 2 ways to sample your students. The first is to use the procedures outlined on pages 43-44 of the Institutional Self-Service Manual: Part 1 under "Systematic Sampling." This procedure should be used if you are unable to have your students complete the questionnaires in class. We will allow randomness to control representation of types and levels of students in the sample (i.e., there will be no need to stratify the population before sampling) so long as all full-time students are included in the alphabetical list from which you will draw your sample.

The second method of sampling is recommended if you are able to have the students complete the questionnaires in class (the recommended method of student assessment). The procedures are:

1. Identify the courses in which all full-time freshmen and sophomores are enrolled during the term during which the assessment is to occur. For example there may be two such courses, it may be English 1 for freshmen and English 3 for sophomores.

2. Satisfy yourself that:

   a) It is reasonable to assume the students are assigned to sections or classes in a random manner (e. g., if they assign themselves during mass registration, assignment is not made according to previous grades, test scores, etc.).

   b) There is no other course (such as a skills development or an advanced course) which can be substituted for the course. That is, all full-time students must be part of the pool from which the sample will be drawn.

3. List the sections of the course or courses and number of students in each section. Select the sections to be used as samples by the "Simple Random Sampling" method outlined on page 43 of the Institutional Self-Service Manual: Part 1. Draw your sections one at a time until you have enough students to meet the requirements for sample size.

Simple Random Sampling

Most statistical theory has been developed under the assumption that random sampling has taken place. Random sampling means that every individual in the population being sampled has an equal chance of being selected. Blommers and Lindquist (1960) define simple random sampling as "a method of selecting a sample of a given size from a given population in such a way that all possible samples of this size which could be formed from this population have equal probabilities of selection (p. 244)." This method allows us to assess mathematically the chances that the amount of error in our results is within a certain specified limit.

Butcher (1965) points out that it is not easy to obtain a strictly random sample, that a random sample is not the same as a haphazard sample. In addition to the necessary condition that every person in the population have an equal chance of being selected for the sample, he stresses that the selection of any individual must be independent of the selection of every other individual. He further states the following:

> One might suppose that it would be possible to choose a random sample of names, numbers, or objects by eye, by consciously avoiding any bias or pattern. All the available evidence suggests that this is not so, and that we all possess unconscious built-in biases or preferences that prevent such a sample from being a random one (p. 4).

The only really efficient method of selecting a simple random sample, other than using a computer, is to select each sample member by using a table of random numbers. Such tables are present in almost any statistics book.

Before using the table of random numbers, number each person of the population consecutively so that each can be identified by a code number. Since a person can be in the sample only once (sampling without replacement), ignore the second or third time that a number appears when using the table.

Systematic Sampling

Systematic sampling means that every kth individual on the alphabetized listing of all members of the population, starting with a randomly selected person from among the first k individuals on the list, is selected for inclusion in the sample.[7] For example, suppose that one had a population of 1000 students, and he wished to draw a sample size of 100. To obtain k he would divide the population by the number of persons to be selected, which equals 10 in this case (1000 ÷ 100). Then he would select a number at random that fell in the range 1 - 10. This would be the number of the first person drawn from the list, and he would also select every tenth person on the list after that person.

Systematic sampling is much simpler and easier to do without making mistakes than random sampling whenever a large sample is to be drawn and/or the population list is very long. In addition, if the list is ordered according to alphabetical order by last name, which is a common order for lists of names, the formulas for determining sample size and for statistical tests appropriate for random sampling are also appropriate for systematic sampling. For all practical purposes in educational research, such systematic sampling can be treated as random sampling (Ballock, 1960, p. 397; Butcher, 1965, p. 6; Cochran, 1963, p. 214). Stallings and Singhal (1968) demonstrated this empirically for students at a large state university. Alphabetical ordering is irrelevant to almost any variable that a college would want to study. Furthermore, systematic sampling may conceivably result in a more representative sample because it is more likely to give proper representation for different ethnic groups. Certain ethnic groups have large proportions of last names beginning with the same letter.

It is usually hazardous to use systematic sampling with population lists that are not ordered alphabetically by name. For example, Kish (1960, p. 398) cites the serious bias which would result if systematic sampling were used for a population ordered according to office, prestige or seniority. Systematic sampling may be useful if lists of persons are ordered according to such variables as age, but the statistical formulas for randomly drawn samples no longer apply. Such a sample is, in effect, a stratified sample.

To use systematic sampling for an ISS study, the following procedures are recommended:

1. Obtain a list of all members for each major population (each regular ISS report population) to be studied.
2. Alphabetize by last name any population list not in alphabetical order.
3. Determine the sample size to be used for each population (discussed on page 45).
4. Divide the sample size chosen for each population into the number of members in the population and round to the lower whole number (which becomes k).

[7] Cochran (1965) states that instead of starting the sequence by a random number between 1 and k, it may be permissible to "take the starting number as $(k + 1)/2$ if k is odd and either $k/2$ or $(k + 2)/2$ if k is even" (pg. 207).

5. Use a table of random numbers for each population to obtain a starting point on the list that could be anywhere from 1 to *k*.

6. Let that individual at the starting point on the list and every *k*th individual after the starting point become members of the sample for each population.

Proportional Stratified Sampling With Systematic or Random Sampling Within Strata

Even though it requires different formulas for making statistical tests (and possibly also for determining sample size: see page 47), this method will give the least sampling error and will result in the greatest ISS sampling effectiveness more often than any other method. Also, the procedures for sampling by this method are almost as simple as those in the two methods previously discussed. Another name for a sample drawn by this method is "representative sample."

For proportional stratified sampling, the population is divided into subpopulations (strata) according to some meaningful categorization, and the ratio of the subpopulation size to the population size is calculated for each strata. Then, using either systematic or random methods, a sample is selected from each subpopulation which has the same ratio to the total sample for the group as does the corresponding subpopulation to the population.

Since separate statistics are given in the ISS report for men and for women, stratifying according to sex may be desirable. Other useful stratification might be made according to educational major, socioeconomic level, size of high school, geographic region, age, etc. Strata can also be defined according to a combination of such variables.

In most cases, it will be desirable for strata to be broken down according to categories selected as ISS supplemental report populations. This procedure will insure large enough samples for all supplemental report analyses. In fact, unless a special procedure is followed, the size needed in the supplemental ISS report samples will determine the size of the regular ISS report samples needed (as outlined on page 48). Using strictly random or systematic sampling for the regular report samples may mean supplementary report samples that are either smaller or larger (according to chance) than the desired number.

As an example, suppose Lambda University had seniors, faculty, and alumni as its three regular ISS report groups (the major populations). The University wished Supplemental Report A groups to be senior liberal arts majors, engineering majors, and education majors. Supplemental Report B was specified to be broken down into business administration majors, economics majors, and accounting majors. Supplemental Report C groups were to be math and physics majors, chemistry majors, and biology majors.

Lambda University, at the time of the survey, had a student body of 8,800 undergraduates (with 1,722 of them seniors), a faculty of 582, and an alumni mailing list that included 36,000 names. Since they wished to do follow-up analyses by department on faculty responses at a later date using the magnetic tape which could be purchased from ACT, the campus ISS planning committee decided to use a 100% sample for faculty.

The committee also decided that it would be desirable to investigate responses separately for the following four groups of alumni at a later date: those who graduated a year ago, those who graduated five years ago, those who graduated ten years ago, and those who graduated twenty years ago. Therefore, it was decided to choose 100 persons from each group for a total alumni sample size of 400. Since the alumni mailing list was on magnetic tape, an available computer select program was used to choose a stratified random sample. The sample included 100 persons from each of the four selected graduation years (nonproportional stratified sampling because the four subsamples were the same size even though the four alumni subpopulations were quite different in size). Systematic sampling was not used for selecting the sample from each alumni stratum because the number of graduates still on the address list for each of those classes was not known and because the list was not presently in alphabetical order by last name (which would mean an additional expense of reordering the list).

For college students, alphabetical listings by name were available for seniors majoring in each of the educational departments on campus. Of the 1,732 seniors, 1,607 of them could be classified into one of the nine categories for which statistics were to be reported in the ISS supplemental research reports. Exactly 125 students could not be classified into any of the nine educational major categories because they were majoring in other subject areas. Therefore, the "Seniors" group of the ISS regular report had ten strata, with the tenth one being "Seniors with other majors."

Since Lambda University had decided to use proportional stratified sampling for the "Seniors" group, the same proportion had to be selected for each stratum. The following procedures were used in developing the sampling design for students:

1. A copy was obtained of the ISS Subgroup Planning Worksheet which is shown on page 19.

PRESS RELEASE

Approximately (number) (your college name) students are expected to participate in a nation-wide project studying change in community and junior colleges.

Under the direction of (local study director's name and title), a scientific sampling of students and faculty here will be requested to respond to questionnaires provided by The American College Testing Program (ACT).

Nationally, the study is sponsored by the American Association of Junior Colleges and funded by a grant from the W. K. Kellogg Foundation. It will involve about 20,000 students and 10,000 faculty members at 100 two-year colleges across the nation.

The project will examine the community and junior colleges in respect to change -- the direction of changes, the facilitators of change, and the impediments to change. More specifically, the research effort will focus on such areas as changes in student populations served, shifts in financial support, and trends in community relations. Student and faculty perceptions of goals, current practices, and college services will be solicited for the purpose of determining just how well student needs are being served.

Survey questionnaires will be administered to a sample of students and faculty members here and at the other colleges selected to participate in the national study.

March 1971

Assessment and Return of Materials Guide

Listed below are the steps we suggest you follow in conducting the assessment. The objective is to maximize the rate of return of answer sheets from both students and faculty members. Every effort in this direction will be rewarded: for you, the data sent back to the campus will be more accurate and reliable--for us, increased confidence in the results of the study.

There are 3 methods of surveying the students. In order of preference they are: (a) in class, (b) at special times in which students are asked to appear for assessment, and (c) by mail. The preferences are a function of cost and maximizing rates of return. We encourage you to use the first alternative if at all possible (See sampling instructions.).

The distribution of the Faculty Questionnaires will be by campus mail.

Student assessment. Each student will be asked to complete the Institutional Self-Study Service (ISS) Survey: College Student Form and the College Student Form Supplement. Consequently, regardless of whether or not the students are surveyed in class, in a special assessment session, or by mail each student should be given the 2 questionnaires, the Student Instruction Sheet (designed to make the survey self-administered regardless of setting), and an answer sheet (the answer sheets must not be folded--consequently, special efforts must be made for distribution and return of answer sheets).

Regardless of the survey arrangements, 1 follow-up attempt should be made. If the survey occurs in classes, ask the instructor to have students who were absent at the first survey to complete the questionnaires during the next class period. If you mail the materials to the student, wait 1 week then telephone nonrespondents (See page 33 of the ISS Manual: Part 1.). If you invite students to complete the instruments in a special session, telephone all who do not show up the first time and invite them to a second session.

Faculty assessment. The "mail then telephone" procedure should be used for the faculty survey. Each faculty member should be mailed a Faculty Questionnaire and an answer sheet. Remember, when surveying by mail, provide a return envelope if necessary (one large enough to accommodate the answer sheet without folding it).

When you have received all the completed answer sheets from students and faculty members, send them and the green-colored College Information Form to the address on the form for scoring. Send the Institutional Questionnaire to: Dr. P. R. Rever, Research and Development Division, The American College Testing Program, P. O. Box 168, Iowa City, Iowa 52240.

Here is a check-off list of things to do:

1. Determine the method of surveying the students: (a) in class, (b) in special assessment sessions, and (c) by mail.

2. Retype 2 copies of the press release accompanying your materials and send 1 copy to your campus newspaper and 1 copy to your community paper.

3. Draw your samples.

4. Check your survey materials to see that you have enough.

5. Conduct the assessment.

6. Hold all completed answer sheets to return at 1 time to the scoring service in Ohio. Do not return unused answer sheets.

7. Be sure to complete the College Information Form and enclose it with the answer sheets before mailing to the scoring service. The ACT code number of your college appears on the invoice of materials you will receive in the shipment.

8. Return the Institutional Questionnaire to:

   Dr. Philip R. Rever
   Research and Development Division
   The American College Testing Program
   P.O. Box 168
   Iowa City, Iowa 52240

9. You may retain all unused materials.

Some Definitions:

1. The Institutional Self-Study Service: College Student Form--the printed questionnaire to be completed by the students.

2. The Institutional Self-Study Manual: Part 1--a guide to sampling and assessment using the ISS.

3. The College Student From Supplement--a 1-page list of 24 questions the student is to answer in addition to the ISS: College Student Form.

4. Student Instruction Sheet--an instruction sheet for students.

5. The Faculty Questionnaire--a special questionnaire for faculty members.

6. The Institutional Self-Study answer sheet--for students and faculty members to record their responses on.

7. The Institutional Self-Study Manual: Part 2--an interpretative guide for the next document.

8. The Institutional Self-Study Report--a report of results on your campus which will be returned to you 3 weeks after the scoring service receives your completed answer sheets and College Information Form.

9. ACT code number--a 4-digit code number to be used to identify your materials when they are returned for scoring. It will be written on the invoice of materials in the shipment. It must be recorded on the College Information Form which must accompany your completed answer sheets when returned to Ohio for scoring. Without the ACT code number and College Information Form you will not receive an ISS Report.

10. College Information Form--a green sheet for you to complete and return with completed answer sheets to the scoring service in Ohio. It will be in the first shipment of materials. See Definition 9 for its importance.

11. Press Release--included in shipment to publicize the study to promote cooperation by students and faculty members. To be sent to campus newspaper and community newspaper.

EXHIBIT III

AMERICAN COLLEGE TESTING PROGRAM

SURVEY

COLLEGE STUDENT FORM

This research instrument is designed to investigate the nature of your college in terms of the opinions of its students. Your responses, along with those of others, will serve to build a composite picture of the college. Most of the questions ask for your evaluations of various aspects of the institution and about the institution's effects on you. Other background items serve to identify important features of the student body. Answers to these questions provide the institution an idea of the nature of its student body and how the needs of its students can be better met.

After these surveys are completed, ACT will prepare a research report that can aid administrators in educational planning. The report will summarize student's feelings about aspects of the college and the effectiveness of its programs.

The research analysis will relate information on this survey with information collected when you wrote the ACT tests. Such a comparison enables the college to consider what happens to its students after they enroll, in terms of their characteristics upon entering college. To identify yourself for this comparison, you are requested to record your Social Security number on the answer sheet by darkening the proper ovals. Please be assured that your reply to this form is confidential. Identification information is necessary *only* for this research purpose.

The Institutional Self-Study Service is a Research Service to help colleges and Universities add student evaluation as a part of their overall institutional assessment.

Education Fields
- Counseling and Guidance ... 01
- Education Administration ... 02
- Elementary Education ... 03
- Physical Education ... 04
- Secondary Education ... 05
- Special Education ... 06
- Education, Other Specialties ... 07

Social Science and Religious Fields
- History ... 08
- Home Economics ... 09
  - Dietetics ... 10
- Library and Archival Science ... 11
- Psychology ... 12
- Social Work ... 13
- Sociology ... 14
- Theology and Religion ... 15
- Social Science
  - Area Studies ... 16
  - American Civilization ... 17
  - American Studies ... 18

Business, Political, and Persuasive Fields
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- Advertising ... 20
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- Finance ... 25
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- Electricity and Electronics ... 93
- Industrial Arts ... 94
- Metal and Machine ... 95
- Mechanical ... 96
- Other Trade ... 97

My future field of training is not included in the fields listed above ... 98
Housewife ... 99
Undecided ... 00

Dear Student:

We want to know how students view our college. Therefore, you have been specially selected to help us by answering some questions. We have joined other community and junior colleges across the country in a nationwide study called Project Focus. Your answers will be combined with those of other students here and at the other colleges in this major undertaking. Although we are asking you to record your social security number, it is only for record keeping to tell us who answered the questions and who did not. Why should you take the time to answer the questions? First, here is a chance to report your views to us in a systematic way. Secondly, not every student will receive this opportunity, so we are counting on you to represent other students.

The instructions to the materials are outlined below; please follow them carefully so your answers to the questions are properly recorded.

1. You should have: (a) the "Institutional Self-Study Service Survey Form," (b) an answer sheet, (c) the College Student Form Supplement, (d) this instruction sheet in front of you, and (e) a No. 2 pencil. You are to use the pencil for recording your answers. Do not use a ball point pen, ink pen, or colored pencil.

2. Read the section "To the Student" on the front of the printed questionnaire (the Institutional Self-Study Service Survey--College Student Form).

3. Instead of answering Items 25 and 28 on pages 4 and 5 of the printed questionnaire respectively, please respond to the following items. So you will remember to ignore the 2 items, we suggest that you cross out Items 25 and 28 in the printed questionnaire, then mark your answer to each of the following questions in the appropriate space on the answer sheet.

   25. What do you estimate your parent's income to be? (Indicate total income before taxes.)

   Less than $3,000 per year. 0
   $3,000 to $4,999. 1
   $5,000 to $7,499. 2
   $7,500 to $9,999. 3
   $10,000 to $14,999. 4
   $15,000 to $19,999. 5
   $20,000 to $24,999. 6
   $25,000 and over. 7
   I don't know or consider this confidential. 8

Continued on back.

28. It is clear that students from different racial and ethnic backgrounds often have different educational needs and goals. To understand the differences on our campus it is important for you to assist us by responding to this item. If your background is listed below, and you wish to identify yourself; please respond to this item. <u>You are not required to provide this information</u>.

Afro-American	1
American Indian	2
Caucasian/White	3
Mexican/Spanish American	4
Oriental American	5
I prefer not to respond	6

4. Now turn your answer sheet so the words "The American College Testing Program" are facing you. Write your social security number, 1 digit to a box in the space under "SOCIAL SECURITY NO." Under each of the numbers darken the rectangle containing the number you recorded in each of the spaces above. If you have no social security number, leave the area blank.

5. Indicate whether you are a freshman or sophomore by darkening the appropriate rectangle under the word "CLASSIFICATION."

6. Enter your birthdate in numbers under the words "DATE OF BIRTH." First write the numbers in the spaces provided by entering the month, date and year. If you were born <u>before</u> the 10th month (October), the first number under month will be zero. For example, if you were born March 8, 1946, enter 03 08 46.

7. Fill in the appropriate rectangle under the word "SEX."

8. Indicate your cumulative grade point average in the appropriate space. If your college uses a system of grading different from the one shown in the block labeled "Cumulative Grade Point Average at this College," omit the item.

9. Turn your answer sheet so that the words "Institutional Self-Study Survey" appear at the top. Beginning with the 1st and remembering to skip Items 25 and 28, answer all the questions in the questionnaire. <u>Be sure to answer all the questions on the College Form Supplement on the answer sheet, too.</u>

10. After completing the questionnaires, please do one of the following:
    a. If materials were received by mail, please place the completed answer sheet in the stamped and preaddressed envelope which is provided and place it in the mail.
    b. If you are in a class, please return the materials to your instructor.

Thank you for your assistance.

College Student Form Supplement*

Items 224-247 provide you with the opportunity to comment on the goals or purposes of your college. How important are these goals? Many of the more commonly mentioned goals are listed in the questions that follow. Some may be thought of as "output" or "ultimate" goals while others are more appropriately classified as "support" or "maintenance" goals. In these questions, both types are considered important.

For each statement of goal in Items 224-235 indicate how much emphasis in your opinion is being placed on the goal at your institution at the present time using the following codes (Mark your answer on the answer sheet.):

1 = Emphasized Very Strongly
2 = Emphasized Strongly
3 = Emphasized a Little
4 = Emphasized Hardly at All
5 = Emphasized Not at All

224. To help formulate programs in a number of public policy areas such as pollution control, urban renewal, and health care.

225. To ensure student participation in institutional decision-making.

226. To make special efforts to attract faculty members who are also members of groups that are in the minority on this campus.

227. To help students acquire the ability to adapt to new occupational requirements as technology and society change.

228. To ensure faculty participation in institutional decision-making.

229. To provide some form of education for any student, regardless of his academic ability.

230. To allocate percentages of the total enrollment for minority groups or groups having low socioeconomic status.

231. To help students develop a respect for their own ability and an understanding of their limitations.

232. To be responsive to the needs of the local community.

Please answer Items 233-247 which are on the back side.

*From Institutional Goals Inventory. A preliminary form developed for research purposes by Educational Testing Service.

233. To provide an opportunity for re-educating and retraining those whose vocational capabilities have become obsolete.

234. To make financial assistance available to any student who wants to enroll in college.

235. To serve the higher education needs of youth from the surrounding community.

For each statement of goal in Items 236-247 indicate how important each goal should be at your institution during the coming decade using the code:

1 = Of Extremely High Importance
2 = Of High Importance
3 = Of Medium Importance
4 = Of Low Importance
5 = Of No Importance

236. To help formulate programs in a number of public policy areas such as pollution control, urban renewal, and health care.

237. To ensure student participation in institutional decision-making.

238. To make special efforts to attract faculty members who are also members of groups that are in the minority on this campus.

239. To help students acquire the ability to adapt to new occupational requirements as technology and society change.

240. To ensure faculty participation in institutional decision-making.

241. To provide some form of education for any student, regardless of his academic ability.

242. To allocate percentages of the total enrollment for minority groups or groups having low socioeconomic status.

243. To help students develop a respect for their own ability and an understanding of their limitations.

244. To be responsive to the needs of the local community.

245. To provide an opportunity for re-education and retraining those whose vocational capabilities have become obsolete.

246. To make financial assistance available to any student who wants to enroll in college.

247. To serve the higher education needs of youth from the surrounding community.

Use No. 2 lead pencil. Mark all answers on the separate answer sheet.

1. From the list on the left page, identify your major field. Mark the appropriate code number on your answer sheet. (The top row of ovals is for the tens digit, and the bottom row is for the units digit.) Indicate *only one* field. If you are undecided, mark "00" on your answer sheet and go on to the next question.

2. From the list on the left page, find the best description of your future vocation, and mark its code on your answer sheet. (The top row of ovals is for the tens digit, and the bottom row is for the units digit.) Again, if you are undecided about your future vocation, mark "00" on your answer sheet. If your future vocation is not included in these fields, mark "98" on your answer sheet; or if you anticipate your future vocation to be exclusively that of housewife, mark "99" on your answer sheet and skip Question 3.

3. Which of the following alternatives describes the main role you expect to play in your future vocation? (For example, if you want to be a physicist and work primarily as a researcher, you would mark "1." If you want to be a doctor who specializes in private practice, you would mark "5." An engineering major who plans to become a sales engineer should mark "4." A teacher who wants to become a principal should mark "3." An art major who plans to become a professional artist should mark "5," etc.)

   - Researcher or investigator 1
   - Teacher or therapist 2
   - Administrator or supervisor 3
   - Promotor or salesman of services or products 4
   - Practitioner, performer, or producer of services or products 5
   - None of the above 6
   - Two or more roles 7
   - Don't know or undecided 8

4. What is the highest level of education you expect to complete?

   - Vocational or technical program (less than two years) 0
   - Junior college degree 1
   - Bachelor's degree or equivalent 2
   - One or two years of graduate or professional study (MA, MBA, etc.) . . 3
   - Doctor of Philosophy or Doctor of Education (PhD or EdD) 4
   - Doctor of Medicine (MD) 5
   - Doctor of Dental Surgery (DDS) 6
   - Law Degree (LLB, JD) 7
   - Theology Degree (BD, THM) 8
   - Other 9

5. Which *one* of the following statements applies to you?

   - I do not have a major 0
   - I have *never* changed my major since entering college:
     - (a) and I intend to continue in my present major field 1
     - (b) but I intend to change my major in the future 2
     - (c) but I would like to change my major, even though I do not feel that I should 3
   - I have changed my major *once* since entering college:
     - (a) and I plan to continue in my present major 4
     - (b) but I will probably change my major again 5
   - I have changed my major *twice* since entering college:
     - (a) and I plan to continue in my present major 6
     - (b) but I will probably change my major again 7
   - I have changed my major *three or more times* since entering college:
     - (a) and I plan to continue in my present major 8
     - (b) but I will probably change my major again 9

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6. When did you make your *present* choice of vocation?
   - At the present time, I am undecided about my vocation . . . 1
   - Before high school . . . 2
   - During high school . . . 3
   - During my freshman year in college . . . 4
   - During my sophomore year in college . . . 5
   - During my junior year in college . . . 6
   - During my senior year in college . . . 7
   - After my senior year in college . . . 8

7. Where did you live when you applied for admission to this college?
   - In the same state as this college and:
     - less than 10 miles from the college . . . 0
     - 10-50 miles from the college . . . 1
     - 50-100 miles from the college . . . 2
     - more than 100 miles from the college 3
   - In a state adjoining this state and:
     - less than 50 miles from the college . . 4
     - 50-100 miles from the college . . . 5
     - more than 100 miles from the college 6
   - In a state not adjoining this state . . . 7
   - In a foreign country:
     - with an English language background 8
     - with a non-English language background . . . 9

8. How old are you?
   - 17 or under . . . 1
   - 18 . . . 2
   - 19-20 . . . 3
   - 21-24 . . . 4
   - 25-29 . . . 5
   - 30-34 . . . 6
   - 35-39 . . . 7
   - 40-49 . . . 8
   - 50 or over . . . 9

9. Marital or Dating Status:
   - Single and not going steady . . . 1
   - Going steady . . . 2
   - Engaged . . . 3
   - Married with no children . . . 4
   - Married with children . . . 5
   - Separated . . . 6
   - Divorced . . . 7
   - Widowed . . . 8
   - Other . . . 9

10. Father's Occupation:
    - Managerial or executive (business executive, banker, store manager, etc.) . . . 1
    - Professional (doctor, lawyer, professor) . . 2
    - Sales (auto salesman, department store clerk, etc.) . . . 3
    - Semiprofessional or technical (programmer, lab technician, etc.) . . . 4
    - Semiskilled (machine operator, construction worker, etc.) . . . 5
    - Skilled trades (electrician, carpenter, plumber, etc.) . . . 6
    - Small business owner or farm owner . . . 7
    - Supervisor or public official (office manager, policeman, etc.) . . . 8
    - Unskilled (general laborer, farm laborer, etc.) . . . 9

11. Father's Education:
    - Less than eighth grade . . . 1
    - Eighth grade . . . 2
    - Some high school . . . 3
    - High school graduate . . . 4
    - Technical or business, etc. . . . 5
    - Some college . . . 6
    - College graduate . . . 7
    - Some graduate or professional work . . . 8
    - Received an advanced degree . . . 9

12. Mother's Education:
    - Less than eighth grade . . . 1
    - Eighth grade . . . 2
    - Some high school . . . 3
    - High school graduate . . . 4
    - Technical or business, etc. . . . 5
    - Some college . . . 6
    - College graduate . . . 7
    - Some graduate or professional work . . . 8
    - Received an advanced degree . . . 9

13. Which of the sources of funds listed below has been the *most* important in financing your college work?
    - Support from my parents or family . . . 1
    - Support from my spouse . . . 2
    - Employment or personal savings . . . 3
    - NDEA loan, bank loan, or other loan . . . 4
    - Economic Opportunity Grant or Work-Study program . . . 5
    - GI Bill, ROTC, veterans or social security benefits or governmental aid . . . 6
    - Scholarship, fellowship, or grant . . . 7
    - Other . . . 8

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14. Parents are:

- Married 1
- Both deceased 2
- Father deceased 3
- Mother deceased 4
- Separated or divorced 5

15. Which *one* of the following statements is true concerning the number of children in your family?

- I was an *only* child 1
- I was the *younger* of:
  - 2 children of the same sex 2
  - 2 children of the opposite sex 3
- I was the *youngest* of 3 or more children . 4
- I was the *older* of:
  - 2 children of the same sex 5
  - 2 children of the opposite sex 6
- I was the *oldest* of 3 or more children . . . 7
- I was *neither the youngest nor the oldest of:*
  - 3 or 4 children 8
  - 5 or more children 9

16. How adequate do you feel your high school education was?

- Excellent 1
- Good 2
- Average 3
- Below average 4
- Very inadequate 5

17. What income (not including that of your spouse) do you expect to have 10 years after graduation?

- None since I intend to be a housewife . . . 1
- Less than $5,000 as a housewife working part time 2
- Less than $7,000 (working full time) . . . 3
- $7,000 - $8,999 4
- $9,000 - $10,999 5
- $11,000 - $14,999 6
- $15,000 - $24,999 7
- $25,000 - $49,999 8
- over $50,000 9

18. How satisfied are you with this college as a whole?

- Completely satisfied 1
- Satisfied 2
- Indifferent 3
- Unsatisfied 4
- Completely unsatisfied 5

19. How well did you apply yourself in high school, and how well have you applied yourself in college?

- Less than average in both high school and college 1
- Less than average in high school, but average or more than average in college 2
- An average amount in both high school and college 3
- More than average in high school, but average or less than average in college 4
- More than average in both high school and college 5

20. How many times did you move or change schools through elementary school and high school? (Count the change from elementary to junior high or junior high to high school *only if* you moved to a different community.)

- None 1
- Once 2
- 2 - 3 times 3
- 4 - 5 times 4
- 6 or more times 5

21. From what kind of high school or secondary school did you graduate?

- Public high school 1
- Private, nonreligious, nonmilitary 2
- Protestant denominational 3
- Catholic 4
- Other 5

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22. About how many students were in your high school graduating class?

- Fewer than 25 1
- 25 - 99 2
- 100 - 199 3
- 200 - 399 4
- 400 - 599 5
- 600 - 899 6
- 900 or more 7

23. Which of the following best describes the community that you thought of as your hometown during high school days?

- *Farm* or open country 1
- *Town* or *city* of:
  - less than 500 population 2
  - 501 - 1,999 3
  - 2,000 - 9,999 4
  - 10,000 - 49,999 5
- *Metropolitan area* of:
  - 50,000 - 249,999 population 6
  - 250,000 - 499,999 7
  - 500,000 - 999,999 8
  - More than 1 million 9

24. About how many hours per week have you usually worked at a part-time job while attending college? *(Exclude* summer work)

- Zero 1
- 1-5 2
- 6-14 3
- 15-24 4
- 25 or more 5

25. About how many hours outside of class per week have you usually studied while attending college?

- 0-3 1
- 4-6 2
- 7-9 3
- 10-12 4
- 13-15 5
- 16-20 6
- 21-25 7
- over 25 8

26. About how many hours of credit have you averaged per semester (quarter, trimester, etc.) since entering this college?

- 1-3 1
- 4-6 2
- 7-9 3
- 10-12 4
- 13-15 5
- 16-18 6
- over 18 7

27. What is your present college residence?

- College dormitory 1
- Fraternity or sorority house 2
- College apartment 3
- Off-campus apartment 4
- Off-campus room 5
- At home with parents 6
- Other 7

28. Have you transferred to this college from another college?

- No 1
- Yes, from a *two-year* college:
  - prior to this school year 2
  - at the beginning of or during this school year 3
- Yes, from a *private liberal-arts* college:
  - prior to this school year 4
  - at the beginning of or during this school year 5
- Yes, from a *state* university or public four-year college:
  - prior to this school year 6
  - at the beginning of or during this school year 7
- Yes, from *some other* higher education institution:
  - prior to this school year 8
  - at the beginning of or during this school year 9

Questions 29-40 describe possible college goals of students. Indicate the degree of importance you attach to each goal by using the following code:

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Essential (*a goal you feel you must accomplish*) 1
Very important 2
Desirable (*a goal of some importance, but less vital than those rated 1 or 2*) . . . 3
Not important (*a goal of little or no importance*) 4

Be sure to respond to every question.

29. To improve my ability to think and reason.
30. To broaden my intellectual interests and my understanding of the world.
31. To increase my appreciation of art, music, literature, and other cultural expressions.
32. To discover my vocational interests.
33. To attain specific skills that will be useful on a job.
34. To meet the academic requirements necessary to enter a profession.
35. To increase my effectiveness in interpersonal relations.
36. To learn how to be an effective leader.
37. To become more capable and interesting socially.
38. To learn how to deal with political or social injustice.
39. To develop more personal independence and self-reliance.
40. To find a cause or causes I can really believe in.

A number of college policies, practices, or facilities are described in questions 41-58 below. Indicate your opinion of these as they apply to your college by using the following code:

Agree 1
Partly agree and partly disagree 2
Disagree 3
I have no opinion on the matter . . . . . N

41. There is adequate provision for student privacy.
42. The regulations governing student conduct are constructive.
43. Rules governing the invitation of controversial speakers are reasonable.
44. The campus newspaper gives a balanced presentation to controversial events.
45. Laboratory facilities for the physical sciences are adequate.
46. Laboratory facilities for the biological sciences are adequate.
47. The cultural program (lectures, concerts, exhibits, plays) is satisfactory in terms of quality and quantity.
48. Sufficient recreational opportunities and facilities (bowling, swimming, etc.) are available.
49. Regulations governing academic probation and dismissal are sensible.
50. Examinations are usually thorough and fair.
51. Library materials are easily accessible.
52. Instructors are generally available for assistance with classwork.
53. Adequate provision is made for gifted students (e.g., honors program, independent study, undergraduate research, etc.)
54. Students have ample opportunity to participate in college policy-making.
55. The college social program (dances, parties, etc.) is successful.
56. Housing regulations (living in apartments, off-campus rooms, etc.) are reasonable.
57. Disciplinary procedures and policies are fair.
58. College food services are adequate in terms of quality, cost, and efficiency.

Questions 59-67 refer to services which are frequently provided by colleges. Describe your reaction to these services at your college by using the following code:

The service was extremely valuable to me 1
I found the service to be worthwhile . . 2
I received little benefit from the service 3
I've never used this service 4
Our college does not offer this service 5

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59. Academic advising service (assistance in selecting courses, adjusting schedules, planning programs, etc.).
60. Counseling service (assistance in choosing a major, vocational planning, resolving personal problems, etc.).
61. Financial needs service (assistance in obtaining a scholarship, loan, part time job, or assistance in budgeting and controlling expenses).
62. Extracurricular activities assistance (in getting started in activities or in making the most of extracurricular opportunities).
63. Orientation service (assistance in getting started in college—learning the ropes, getting acquainted, overcoming apprehensions).
64. Housing services (assistance in locating suitable housing).
65. Housing advisory services (assistance in dealing with roommate problems, advice in handling everyday concerns, programs designed to make the housing arrangement more educational and enjoyable).
66. Health service (assistance in dealing with illness or injury).
67. Developmental education services (improvement of reading, study skills, spelling, etc.).

Questions 68-79 below list some statements describing possible outcomes of a college education. Indicate the degree to which you feel you have made progress on each of these outcomes by marking your answer sheet in accordance with the following code:

Substantial progress 1
Some progress 2
Not much progress 3

68. Acquiring a broad cultural and literary education.
69. Acquiring vocational training—skills and techniques directly applicable to a job.
70. Acquiring background and specialization for further education in some professional, scientific, or scholarly field.
71. Understanding different philosophies, cultures, and ways of life.
72. Social development—gaining experience and skill in relating to other people.
73. Personal development—understanding one's abilities and limitations, interests and standards of behavior.
74. Knowing how to participate effectively as a citizen in one's community and in wider areas.
75. Developing an ability to write and to speak clearly, correctly, and effectively.
76. Developing an ability to think critically and to understand the origin, nature, and limitations of knowledge.
77. Developing an appreciation and an enjoyment of art, music, and literature.
78. Developing an understanding and an appreciation of science and technology.
79. Improving prospects for making high income and gaining professional status.

Questions 80-93 ask you to describe the instructors you have had at this college. Use the following scale to indicate how frequently each statement is true:

A majority of my instructors 1
About half of my instructors 2
A minority of my instructors 3

80. Instructors give students ample opportunity to participate in discussion, to ask questions, and to express points of view.
81. Lectures are dry, dull, and monotonous.
82. Students are given an important voice in determining class objectives and procedures.
83. Instructors appear to be uneasy and nervous.
84. Faculty members have an unusual facility for communicating their knowledge to students.
85. Instructors criticize or embarrass students in the classroom.

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86. Instructors present material in an entertaining (e.g., dramatic, humorous) manner.
87. Instructors give disorganized, superficial, or imprecise treatment to their material.
88. Instructors give personal opinions or describe personal experiences.
89. Instructors don't seem to care whether or not class material is understood.
90. Out-of-class assignments (reading, papers, etc.) are reasonable in length.
91. Insufficient distinction is made between major ideas and less important details.
92. Instructors relate course material to contemporary problems.
93. Instructors seem to be "out of touch" with student life.

Questions 94-123 refer to your use of leisure time while you have been attending college. If, while attending college, you have engaged in the activity ON YOUR OWN, i. e., *NOT AS A PART OF A CLASS ASSIGNMENT,* mark the Y ("Yes") response. If you cannot recall having participated in the activity while in college (except, perhaps, as part of an assignment), mark the N ("No") response.

94. Attempted to invent something.
95. Read some poetry.
96. Discussed merits of political-economic systems (e.g., communism, socialism) with friends.
97. Attended a scientific lecture.
98. Visited an art exhibit.
99. Discussed world or national political problems (candidates, issues) with friends.
100. Attended a scientific exhibit.
101. Tried some sketching, drawing, or painting.
102. Watched four or more TV news specials in a year.
103. Read a technical journal or a scientific article.
104. Attended a poetry reading or a literary talk.
105. Discussed social issues (e.g., civil rights, pacificism) with friends.
106. Attempted to solve mathematical puzzles.
107. Attended a stage play.
108. Discussed campus issues with friends.
109. Attempted to develop a new scientific theory.
110. Read six or more articles a year in *Atlantic, Commonweal, Harpers,* and/or *Saturday Review.*
111. Attended a lecture on a current social, economic, or political problem.
112. Discussed a scientific theory or event with friends.
113. Discussed art or music with friends.
114. Read the editorial column of a newspaper at least once a week.
115. Devised a mathematical puzzle.
116. Discussed philosophy or religion with friends.
117. Read an article or book analyzing in depth a political or social issue.
118. Regularly read popular accounts of scientific advances (in *Time, Newsweek,* etc.).
119. Discussed plays, novels, or poetry with friends.
120. Read a biography or autobiography of a political or social reform leader.
121. Explained or illustrated a scientific principle to someone.
122. Attended a music recital or concert.
123. Read a book on psychology, sociology, or history.

Questions 124-223 also deal with experiences you may have had in college. They are grouped into ten lists of "out-of-class" accomplishments (Leadership, Social Participation, etc.); each list contains ten items which describe specific accomplishments or awards.

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For each of the lists, read all ten items and then indicate which ones are true of you by blackening the appropriate oval or ovals on your answer sheet. If on a given list none of the ten items are true for you, blacken the "None" oval and go on to the next list.
Don't be discouraged by these statements; only an unusual student will be able to say "Yes" to many items.

LIST 1. LEADERSHIP

124. Elected to one or more student offices.
125. Appointed to one or more student offices.
126. Was an active member of four or more student groups.
127. Elected president of class (freshman, sophomore, etc.) in any year of college.
128. Served on a student-faculty committee or group.
129. Elected or appointed as a member of a campus-wide student group, such as student council, student senate, etc.
130. Served on a governing board or an executive council of a student group.
131. Elected as one of the officers of a class (freshman, sophomore, etc.) in any year of college.
132. Elected president of a "special interest" student club, such as psychology club, mountain climbing club, etc.
133. Received an award or special recognition of any kind for leadership.

LIST 2. SOCIAL PARTICIPATION

134. Actively campaigned to elect another student to a campus office.
135. Organized a college political group or campaign.
136. Worked actively in an off-campus political campaign.
137. Worked actively in a student movement to change institutional rules, procedures, or policies.
138. Initiated or organized a student movement to change institutional rules, procedures, or policies.
139. Participated in a student political group (Young Democrats, Young Republicans, etc.).
140. Participated in one or more demonstrations for some political or social goal, such as civil rights, free speech for students, states' rights, etc.
141. Wrote a "letter to the editor" regarding a social or civic problem.
142. Wrote a letter to a state legislator or U.S. representative or senator about pending or proposed legislation.
143. Worked actively in a special study group (other than a class assignment) for the investigation of a social or political issue.

LIST 3. ART

144. Won a prize or award in art competition (drawing, painting, sculpture, ceramics, architecture, etc.).
145. Exhibited or published at my college one or more works of art, such as drawings, paintings, sculptures, ceramics, etc.
146. Had drawings, photographs, or other art work published in a public newspaper or magazine.
147. Entered an artistic competition of any kind.
148. Produced on my own (not as part of a course) one or more works of art, such as drawings, paintings, sculptures, ceramics, etc.
149. Exhibited or published *not at my college* one or more works of art, such as drawings, paintings, sculptures, ceramics, etc.
150. Sold one or more works of art, such as drawings, paintings, sculptures, ceramics, etc.
151. Own a collection of art books, paintings, or reproductions.
152. Designed, made, and sold handicraft items such as jewelry, leathercraft, etc.
153. Created or designed election posters, program covers, greeting cards, stage settings for a play, etc.

LIST 4. SOCIAL SERVICE

154. Worked actively in a student service group or organization.
155. Worked actively in a charity drive.
156. Worked as a volunteer aide in a hospital, clinic, or home.
157. Served as a big brother (sister) or advisor to one or more foreign students.
158. Organized a student service group.
159. Worked actively in an off-campus service group or organization.
160. Worked as a volunteer on a campus or civic improvement project.
161. Participated in a program to assist children or adults who were handicapped mentally, physically, or economically.
162. Voluntarily tutored a fellow student.
163. Received an award or recognition for any kind of campus or community service.

LIST 5. SCIENTIFIC

164. Built scientific equipment (laboratory apparatus, a computer, etc.) on my own (not as a part of a course).
165. Was appointed a teaching or research assistant in a scientific field.
166. Received a prize or award for a scientific paper or project.
167. Gave an original paper at a convention or meeting sponsored by a scientific society or association.
168. On my own (not as part of a course), carried out or repeated one or more scientific experiments, recorded scientific observations of things or events in the natural setting, or assembled and maintained a collection of scientific specimens.
169. Authored or co-authored scientific or scholarly paper published (or in press) in a scientific journal.
170. Invented a patentable device.
171. Was a member of a student honorary scientific society.
172. Entered a scientific competition of any kind.
173. Wrote an unpublished scientific paper (not a course assignment).

LIST 6. HUMANISTIC-CULTURAL

174. Developed and followed a program of reading of poetry, novels, biographies, etc. on my own (not course assignment).
175. Was a member of a student honorary society in the humanities (literature, philosophy, language, etc.).
176. Built a personal library around a core collection of poetry, novels, biographies, etc.
177. Attended a convention or meeting of a scholarly society in the humanities (literature, philosophy, language, etc.).
178. Authored or co-authored an original paper published (or in press) in a scholarly journal in the humanities (literature, philosophy, language, etc.).
179. Read scholarly journals in the humanities on my own (not as a course assignment).
180. Read one or more "classic" literary works on my own (not as a course assignment).
181. Wrote on my own (not a course assignment) an unpublished scholarly paper in the humanities.
182. Won a prize or award for work in the humanities.
183. Gave an original paper at a convention or meeting sponsored by a scholarly society in the humanities.

LIST 7. RELIGIOUS SERVICE

184. Was an active member of a student religious group.
185. Organized or reorganized a student religious group.
186. Was an active member of an off-campus religious group (not a church).
187. Held one or more offices in a religious organization.
188. Led one or more religious services.
189. Taught in a church, synagogue, etc.

GO ON TO NEXT PAGE

190. Attended one or more religious retreats, conferences, etc.
191. Participated in a religious study group.
192. Worked to raise money for a religious institution or group.
193. Did voluntary work for a religious institution or group.

LIST 8. MUSIC

194. Composed or arranged music which was publicly performed.....
195. Publicly performed on two or more musical instruments (including voice) which do not belong to the same family of instruments.
196. Conducted music which was publicly performed.
197. Presented in public a solo recital which was not under the auspices of a college or church.
198. Attained recognition in the form of an award or scholarship in a national or international music competition.
199. Received pay for performing as a professional music teacher on a continuing basis.
200. Composed or arranged music which has been published.
201. Attained a first division rating in a state or regional solo music contest.
202. Received pay for performing as a professional musician on a continuing basis.
203. Authored or co-authored a book, an article, or a criticism bearing on the general subject of music.

LIST 9. WRITING

204. Had poems, stories, essays, or articles published in a public (not college) newspaper, anthology, etc.
205. Wrote one or more plays (including radio or TV plays) which were given public performance.
206. Was feature writer, reporter, etc., for college paper, annual, magazine, anthology, etc.
207. Was editor for college paper, annual, magazine, anthology, etc.
208. Did news or feature writing for public (not college) newspaper.
209. Had poems, stories, essays, or articles published in a college publication.
210. Wrote an original but unpublished piece of creative writing on my own (not as part of a course).
211. Won a literary prize or award for creative writing.
212. Systematically recorded my observations and thoughts in a diary or journal as resource material for writing.
213. Was a member of a student honorary group in creative writing or journalism.

LIST 10. SPEECH AND DRAMA

214. Participated in one or more contests in speech, debate, extemporaneous speaking, etc.
215. Placed second, third, or fourth in a contest in speech, debate, extemporaneous speaking, etc.
216. Won one or more contests in speech, debate, extemporaneous speaking, etc.
217. Had one or more minor roles in plays produced by my college or university.
218. Had one or more leads in plays produced by my college or university.
219. Had one or more leads or minor roles in plays *not* produced by my university.
220. Gave dramatic performance on radio or TV program.
221. Received an award for acting or other phase of drama.
222. Gave a recital in speech.
223. Participated in a poetry reading, play reading, dramatic production, etc. (not a course assignment).

Items 224-247 on your answer sheet provide the opportunity to answer relevant questions designed by your college to meet special needs on your campus.

EXHIBIT IV

Project Focus

March 1971

Dear Colleague:

Your college is cooperating in a national study of the nation's community and junior colleges being conducted by the American Association of Junior Colleges (AAJC) and funded by the W. K. Kellogg Foundation. Its aim is to examine the long-range goals and present practices of the community-junior colleges and, in the process, to identify the social and economic trends which will influence their role and function for the coming decade.

As faculty members, we are interested in your background and perceptions as to the future of community-junior colleges. Since you are a very select sample and you will be representing the views of other faculty members, it is important that you respond to this questionnaire.

Your answers will be kept completely confidential. No one will see your responses except the professional staff working on this project. All results will be summarized by groups; individual responses will not be released. However, for the purpose of monitoring questionnaire returns, we need your name on the answer sheet.

The following pages contain the instructions for recording your answers and the questions to be answered.

Sincerely,

E. J. Gleazer, Jr.

E. J. Gleazer, Jr.
Project Director

INSTITUTIONAL SELF-STUDY SERVICE

Education Fields
- Counseling and Guidance ... 01
- Education Administration ... 02
- Elementary Education ... 03
- Physical Education ... 04
- Secondary Education ... 05
- Special Education ... 06
- Education, Other Specialties ... 07

Social Science and Religious Fields
- History ... 08
- Home Economics ... 09
  - Dietetics ... 10
- Library and Archival Science ... 11
- Psychology ... 12
- Social Work ... 13
- Sociology ... 14
- Theology and Religion ... 15
- Social Science
  - Area Studies ... 16
  - American Civilization ... 17
  - American Studies ... 18

Business, Political, and Persuasive Fields
- Accounting ... 19
- Advertising ... 20
- Business Administration (4 years) ... 21
- Business and Commerce (2 years) ... 22
- Data Processing ... 23
- Economics ... 24
- Finance ... 25
- Industrial Relations ... 26
- Law ... 27
- Merchandising and Sales ... 28
- Military ... 29
- Political Science, Government, or Public Administration ... 30
  - Foreign Services ... 31
  - International Relations ... 32
- Public Relations ... 33
- Secretarial Science ... 34

Scientific Fields
- Anatomy ... 35
- Anthropology ... 36
- Archaeology ... 37
- Astronomy ... 38
- Biology or Genetics ... 39
- Botany ... 40
- Chemistry ... 41
- Geography ... 42
- Geology or Geophysics ... 43
- Mathematics or Statistics ... 44
- Meteorology ... 45
- Oceanography ... 46
- Physics ... 47
- Physiology ... 48
- Zoology or Entomology ... 49

Agriculture and Forestry
- Agriculture ... 50
- Fish and Game Management ...
- Forestry ...
- Soil Conservation ... 53

Health Fields
- Dental Hygiene ... 54
- Dentistry ... 55
- Medicine ... 56
- Medical Technology ... 57
- Mortuary Science ... 58
- Nursing ... 59
- Occupational Therapy ... 60
- Optometry ... 61
- Osteopathy ... 62
- Pharmacy ... 63
- Physical Therapy ... 64
- Veterinary Medicine ... 65
- X-Ray Technology ... 66

Arts and Humanities
- Arts and Sculpture ... 67
- Architecture ... 68
- Creative Writing ... 69
- Drama and Theater ... 70
- English and English Literature ... 71
- Foreign Language and Literature ... 72
- Journalism ... 73
- Music ... 74
- Philosophy ...
- Radio-TV Communications ...
- Speech ...
- General Education or Liberal Arts (2 years) ... 78
- Other Arts and Humanities ... 79

Engineering
- Aeronautical ... 80
- Agricultural ... 81
- Architectural ... 82
- Automotive ... 83
- Chemical or Nuclear ... 84
- Civil ... 85
- Electrical or Electronic ... 86
- Industrial ... 87
- Mechanical ... 88
- Other ... 89

Trade, Industrial, and Technical
- Aviation ... 90
- Construction ... 91
- Drafting ... 92
- Electricity and Electronics ... 93
- Industrial Arts ... 94
- Metal and Machine ... 95
- Mechanical ... 96
- Other Trade ... 97

My future field of training is not included in the fields listed above ... 98

Housewife ...

Undecided ...

You should have a red answer sheet on which to record your answers to the questions posed hereafter. Use a No. 2 pencil to record your answers by darkening the incomplete rectangle bounding the number identifying your response.

Before proceeding with the questions, turn your answer sheet so the words "The American College Testing Program" appear at the top. Please print your name on the appropriate line at the top of the page. Again, this is for the purpose of determining who has not returned their questionnaire so they can be contacted later.

After recording your name, find the box labeled "Classification" on the right side of the answer sheet and darken the rectangle beside the word "Faculty."

In the box labeled "Date of Birth" print the numeric representation of your birth date in the blank spaces under the words "Mo., Day, and Yr." Enter leading zeros where appropriate. For example, if you were born on March 9, 1941, write 03 09 41. In the column under each of the digits you recorded, darken the rectangle bounding the number corresponding to the above it.

In the box labeled "Sex" darken the appropriate rectangle.

Turn your answer sheet so the words "Institutional Self-Study Survey" appear at the top.

1. From the list on the left page find the name of the field which comes closest to your departmental affiliation. Enter the code number of the field on the answer sheet. (The top row of rectangles is for the tens digit and the bottom row is for the units digit.)
2. From the list on the left page find the name of the field in which you received your highest degree. Enter the code number of the field on the answer sheet. (The top row of rectangles is for the tens digit and the bottom row is for the units digit.)
3. Much has been written about the differences in educational philosophy and approaches of faculty members from different backgrounds. To investigate the differences, indeed to determine if there are any, we are asking you to indicate your racial and ethnic background. If you wish to identify your background and if it is listed below, please respond to this item. <u>You are not required to respond to this item</u>.

   Afro-American/Black. 1
   American Indian. 2
   Caucasian/White. 3
   Mexican/Spanish-American 4
   Oriental American. 5
   Other. 6
   I prefer not to respond. 7

4. and 5. How many class hours or periods do you spend each week in actual student instruction (e.g., 30 hours for 5, 6-period days; 12 hours for 3-hour courses). Enter 2 digits--the tens digit beside 4 (zero if appropriate) and units digit beside 5.
6. If you were employed by an educational institution immediately prior to being employed by your current institution, which of the following best describes it? Omit if not employed by educational institution and go to Item 7.

   Elementary school. 1
   Junior high school 2
   Comprehensive high school. 3
   Vocational, technical high school. . 4
   Technical institute, area center . . 5
   Junior, community college. 6
   Four-year college, university. . . . 7
   Other. 8

GO ON TO NEXT PAGE.

Using the code below, indicate the number of calendar years you were employed by the institutions listed in Items 7 - 12.

Never employed . . . . . omit
1 - 4 years. 1
5 - 9 years. 2
10 - 14 years. 3
15 - 19 years. 4
20 - 24 years. 5
25 - 29 years. 6
30 - 34 years. 7
35 - 39 years. 8
40 or more years 9

7. Elementary school or junior high school
8. Comprehensive high school
9. Vocational, technical high school
10. Technical institute, area center
11. Junior, community college
12. Four-year college, university

13. Counting this year, how many years have you taught in educational institutions in all?

1 - 5 years. 1
6 - 10 years 2
11 - 15 years. 3
16 - 20 years. 4
21 - 25 years. 5
26 - 30 years. 6
31 - 35 years. 7
36 or more years 8

14. Which of the following is the most appropriate description of your major job at this institution this semester (spring 1970-71)?

Full-time faculty member 1
Part-time faculty member 2
Part-time faculty member and part-time counselor 3
Part-time faculty member and part-time administrator 4
Other. 5

15. Which of the following is the worst aspect of teaching?

1. A teacher is expected to spend an undue amount of time in community, social, and extracurricular activities.
2. Poor physical conditions in which to work.
3. Educational personnel are held unjustly responsible for community and family shortcomings in child rearing.
4. Unappreciative and unmotivated students.
5. Poor administration and excessive red tape.
6. Heavy teaching loads.
7. Burden of excessive clerical and administrative work.
8. Not enough time during regular school hours to do adequate background preparation or keep up to date.
9. No particular drawbacks.

16. How satisfied are you with this college as a whole?

Completely satisfied. 1
Satisfied 2
Indifferent 3
Unsatisfied 4
Completely unsatisfied. 5

If you expect that your major occupation will be in the field of education 5 years from now, answer Questions 18 and 19. Otherwise, answer Question 17.

17. Since you do not expect that your major occupation will be in the field of education 5 years from now, what is likely to be your major activity?

Marriage, raising family. 1
Work in private business or industry 2
Work in government. 3
Self-employed 4
Retirement. 5
Other 6
Undecided 7

Go on to Question 20.

18. In what area of education do you expect to be in 5 years from now?

Teaching. 1
Counseling. 2
Administration. 3
Other 4

19. What type of school do you expect to be in 5 years from now?

High school 1
Vocational, technical center. . . . 2
Junior, community college 3
College, university 4
Other 5

20. What is the highest degree you hold?

High school diploma 1
A.A., A.A.S., A.S. 2
B.A., B.S., B.Ed. 3
M.A., M.S., M.Ed. 4
Ph.D., Ed.D.. 5

21. Which of the following degrees are you now working on? (If none, omit.)

High school diploma. 1
A.A., A.A.S., A.S. 2
B.A., B.S., B.Ed. 3
M.A., M.S., M.Ed. 4
PhD., Ed.D. 5

Skip Questions 24 - 40. Therefore, begin answering the following questions beginning with Item 41.

A number of college policies, practices, or facilities are described in Questions 41 - 58 below. Indicate your opinion of these as they apply to your college by using the following code:

Agree. 1
Partly agree and partly disagree . . 2
Disagree 3
I have no opinion on the matter. . . N

41. There is adequate provision for student privacy. (Remember to record your opinion beside 41 on answer sheet.)

The regulations governing student conduct are constructive.

43. Rules governing the invitation of controversial speakers are reasonable.

44. The campus newspaper gives a balanced presentation to controversial events.

45. Laboratory facilities for the physical sciences are adequate.

46. Laboratory facilities for the biological sciences are adequate.

47. The cultural program (lectures, concerts, exhibits, plays) is satisfactory in terms of quality and quantity.

48. Sufficient recreational opportunities and facilities (bowling, swimming, etc.) are available.

49. Regulations governing academic probation and dismissal are sensible.

50. Examinations are usually thorough and fair.

51. Library materials are easily accessible.

52. Instructors are generally available for assistance with classwork.

53. Adequate provision is made for gifted students (e.g., honors program, independent study, undergraduate research, etc.)

54. Students have ample opportunity to participate in college policy-making.

55. The college social program (dances, parties, etc.) is successful.

56. Housing regulations (living in apartments, off-campus rooms, etc.) are reasonable.

57. Disciplinary procedures and policies are fair.

58. College food services are adequate in terms of quality, cost, and efficiency.

Questions 59 - 67 refer to services which are frequently provided by colleges. Describe your reaction to these services at this college by using the following code:

This service is extremely valuable to the students. 1
This service is worthwhile 2
The students use this service but receive little benefit from it 3
The students never use this service 4
The college does not offer this service. 5

59. Academic advising service (assistance in selecting courses, adjusting schedules, planning programs, etc.).

60. Counseling service (assistance in choosing a major, vocational planning, resolving personal problems, etc.).

61. Financial needs service (assistance in obtaining a scholarship, loan, part-time job, or assistance in budgeting and controlling expenses).

62. Extracurricular activities assistance (in getting started in activities or in making the most of extracurricular opportunities).

63. Orientation service (assistance in getting started in college--learning the ropes, getting acquainted, overcoming apprehensions).

64. Housing services (assistance in locating suitable housing).

65. Housing advisory services (assistance in dealing with roomate problems, advice in handling everyday concerns, programs designed to make the housing arrangement more educational and enjoyable).

66. Health service (assistance in dealing with illness or injury).

67. Developmental education services (improvement of reading, study skills, spelling, etc.).

Again, we are skipping some questions (68 - 79). So please be sure to record your answers in the appropriate place on the answer sheet.

Questions 80 - 93 ask you to describe how you think the typical student sees instructors at this college. Use the following scale to indicate how frequently each statement is true:

A majority of instructors. 1
About half of the instructors. 2
A minority of instructors. 3

80. Instructors give students ample opportunity to participate in discussion, to ask questions, and to express points of view.

81. Lectures are dry, dull, and monotonous.

82. Students are given an important voice in determining class objectives and procedures.

83. Instructors appear to be uneasy and nervous.

84. Faculty members have an unusual facility for communicating their knowledge to students.

85. Instructors criticize or embarrass students in the classroom.

86. Instructors present material in an entertaining (e.g., dramatic, humorous) manner.

87. Instructors give disorganized, superficial, or imprecise treatment to their material.

88. Instructors give personal opinions or describe personal experiences.

89. Instructors don't seem to care whether or not class material is understood.

90. Out-of-class assignments (reading, papers, etc.) are reasonable in length.

91. Insufficient distinction is made between major ideas and less important details.

92. Instructors relate course material t contemporary problems.

93. Instructors seem to be "out of touch" with student life.

Items 94 - 103 indicate activities you might do during the summer of 1971. Indicate what you plan to do by using the following code:

Yes. . . . . Y
No . . . . . N

94. Teach.

95. Develop course plans.

96. Attend summer school.

97. Work full-time at my nonteaching job.

98. Take a summer job related to my teaching field.

99. Take a summer job unrelated to my teaching field.

100. Research, write.

101. Travel.

102. Rest, marriage, be with family.

103. Undecided.

Respond to Questions 104 - 109 by using the following code:

Yes. . . . . Y
No . . . . . N

104. Do you hold a certificate of apprenticeship?

105. Do you hold a certificate of proficiency?

106. Did you receive your highest educational degree from an institution in this state?

107. Do you feel junior colleges should be more selective of its students than they are now?

108. Do you feel junior college faculty members have a harder job than faculty members at 4-year colleges?

109. Do you feel you have a more important job than faculty members at 4-year colleges?

Once again we are skipping some items. Be <u>sure</u> to record your answers to the questions below on the answer sheet in the proper place.

Faculty Goals Inventory*

Items 224 - 235 provide you with the opportunity to comment on the goals or purposes of your college. How important are these goals? Many of the more commonly mentioned goals are listed in the questions that follow. Some may be thought of as "output" or "ultimate" goals while others are more appropriately classified as "support" or "maintenance" goals. In these questions, both types are considered important.

For each statement of goal in Items 224 - 235 indicate how much emphasis is being placed on the goal at your institution at the present time using the following codes (Mark your answer on the answer sheet.):

1 = Emphasized Very Strongly
2 = Emphasized Strongly
3 = Emphasized a Little
4 = Emphasized Hardly at All
5 = Emphasized Not at All

224. To help formulate programs in a number of public policy areas such as pollution control, urban renewal, and health care.

225. To ensure student participation in institutional decision-making.

226. To make special efforts to attract faculty members who are also members of groups that are in the minority on this campus.

227. To help students acquire the ability to adapt to new occupational requirements as technology and society change.

228. To ensure faculty participation in institutional decision-making.

229. To provide some form of education for any student, regardless of his academic ability.

230. To allocate percentages of the total enrollment for minority groups or groups having low socioeconomic status.

231. To help students develop a respect for their own ability and an understanding of their limitations.

232. To be responsive to the needs of the local community.

233. To provide an opportunity for re-educating and retraining those whose vocational capabilities have become obsolete.

234. To make financial assistance available to any student who wants to enroll in college.

235. To serve the higher education needs of youth from the surrounding community.

For each statement of goal in Items 236 - 247 indicate how important each goal <u>should</u> be at your institution during the coming decade using the code:

1 = Of Extremely High Importance
2 = Of High Importance
3 = Of Medium Importance
4 = Of Low Importance
5 = Of No Importance

236 To help formulate programs in a number of public policy areas such as pollution control, urban renewal, and health care.

237. To ensure student participation in institutional decision-making.

238. To make special efforts to attract faculty members who are also members of groups that are in the minority on this campus.

239. To help students acquire the ability to adapt to new occupational requirements as technology and society change.

240. To ensure faculty participation in institutional decision-making.

241. To provide some form of education for any student, regardless of his academic ability.

242. To allocate percentages of the total enrollment for minority groups or groups having low socioeconomic status.

243. To help students develop a respect for their own ability and an understanding of their limitations.

244. To be responsive to the needs of the local community.

245. To provide an opportunity for re-educating and retraining those whose vocational capabilities have become obsolete.

246. To make financial assistance available to any student who wants to enroll in college.

247. To serve the higher education needs of youth from the surrounding community.

EXHIBIT V

project focus
strategies for change

Madison Office Building
Suite 600
1155 15th Street, N.W.
Washington, D.C. 20005
Area Code 202/833-1177
Edmund J. Gleazer, Jr.
Project Director
David S. Bushnell
Research Director
Francis C. Pray
Associate

COMMUNITY AND JUNIOR COLLEGE PRESIDENTS QUESTIONNAIRE

Attached for your response is a brief questionnaire designed to provide information about the significant goals and practices at your institution. Your responses will become a part of a larger data bank of information to be used in a nationwide study of community and junior colleges. Your responses will be kept strictly confidential and your name and your college will never be associated with your individual answers in any reports. Findings and recommendations of the study will be reported back to you on an aggregate basis in the fall of 1971.

We will appreciate the return of the questionnaire in the enclosed stamped, self-addressed envelope as soon as possible. Please check to see that the information on the address label is correct.

If a question or part of a question does not apply to your institution, please indicate by checking the appropriate response or by writing in "does not apply." Thank you very much for your assistance.

Edmund J. Gleazer, Jr.
Project Director

To Be Filled out by the Campus President Only

A National Study by the American Association of Junior Colleges under a Grant from the W. K. Kellogg Foundation.

1. If your campus financial resources (operating and capital budgets) were to vary over the next 10 years in the indicated manner (assuming that enrollment stayed the same), what priority would you assign to each of the activities listed below? Please circle one response only in each of the three columns for each item listed.

Activities	Not applicable at this institution	IF FINANCIAL RESOURCES– *Decreased substantially*			*Stayed the same*			*Increased substantially*		
		High priority	Medium priority	Low priority	High priority	Medium priority	Low priority	High priority	Medium priority	Low priority
a. College-sponsored workshops and seminars	0	1	2	3	1	2	3	1	2	3
b. Community service centers (off campus)	0	1	2	3	1	2	3	1	2	3
c. Ethnic studies	0	1	2	3	1	2	3	1	2	3
d. Faculty training programs	0	1	2	3	1	2	3	1	2	3
e. Outreach counseling and recruitment	0	1	2	3	1	2	3	1	2	3
f. Noncredit courses	0	1	2	3	1	2	3	1	2	3
g. Remedial programs	0	1	2	3	1	2	3	1	2	3
h. Residential facilities	0	1	2	3	1	2	3	1	2	3
i. Student extracurricular activities (band, choir, organizations, publications, etc.)	0	1	2	3	1	2	3	1	2	3
j. Adult evening courses	0	1	2	3	1	2	3	1	2	3
k. Student guidance and counseling	0	1	2	3	1	2	3	1	2	3
l. Library services	0	1	2	3	1	2	3	1	2	3
m. Nontenured faculty	0	1	2	3	1	2	3	1	2	3
n. Maintenance	0	1	2	3	1	2	3	1	2	3

2. Colleges serve a number of purposes, some of which may be regarded as more important than others. What do you consider to be the purposes of your institution? How important are these goals? Many of the more commonly mentioned goals of a college are listed in the question below. Some may be thought of as "output" or "ultimate" goals while others are more appropriately classified as "support" or "maintenance" goals. In this question, both types are considered important. Please rate each goal statement in terms of its actual emphasis today and its potential importance in the coming decade (indicate your rating by circling the number under your rating for each goal).

Goal Statement[a]	This Goal Is Presently–					In the Coming Decade, This Goal Should Be–				
	Emphasized very strongly	Emphasized strongly	Emphasized a little	Emphasized hardly at all	Emphasized not at all	Of extremely high importance	Of high importance	Of medium importance	Of low importance	Of no importance
a. To serve the higher education needs of youth from the surrounding community.	1	2	3	4	5	1	2	3	4	5
b. To experiment with new forms of instruction.	1	2	3	4	5	1	2	3	4	5
c. To make available financial assistance so that any academically qualified student is able to enroll and remain in college.	1	2	3	4	5	1	2	3	4	5
d. To increase the desire and ability of students to undertake self-directed study.	1	2	3	4	5	1	2	3	4	5
e. To help formulate programs in a number of public policy areas such as pollution control, urban renewal, and health care.	1	2	3	4	5	1	2	3	4	5
f. To develop educational programs for special categories of students, e.g., disadvantaged, very bright, foreign students, etc.	1	2	3	4	5	1	2	3	4	5
g. To establish and clearly define the purposes the institution will serve.	1	2	3	4	5	1	2	3	4	5
h. To ensure student participation in institutional decision-making.	1	2	3	4	5	1	2	3	4	5
i. To make special efforts to attract faculty members who are also members of groups that are in the minority on this campus.	1	2	3	4	5	1	2	3	4	5
j. To help students acquire the ability to adapt to new occupational requirements as technology and society change.	1	2	3	4	5	1	2	3	4	5
k. To maintain an atmosphere of intellectual excitement among faculty, students, and administrators.	1	2	3	4	5	1	2	3	4	5
l. To increase the number and diversity of sources of income.	1	2	3	4	5	1	2	3	4	5

continued

[a]From *Institutional Goals Inventory*. A preliminary form developed for research purposes by Educational Testing Service. Adapted and reproduced by permission.

2. (continued)

Goal Statement	This Goal Is Presently—					In the Coming Decade, This Goal Should Be—				
	Emphasized very strongly	Emphasized strongly	Emphasized a little	Emphasized hardly at all	Emphasized not at all	Of extremely high importance	Of high importance	Of medium importance	Of low importance	Of no importance
m. To provide an opportunity for re-educating and retraining those whose vocational capabilities have become obsolete.	1	2	3	4	5	1	2	3	4	5
n. To strengthen the religious faith of students.	1	2	3	4	5	1	2	3	4	5
o. To help solve social, economic, or political problems in the immediate geographical area.	1	2	3	4	5	1	2	3	4	5
p. To ensure faculty participation in institutional decision-making.	1	2	3	4	5	1	2	3	4	5
q. To provide some form of education for any student, regardless of his academic ability.	1	2	3	4	5	1	2	3	4	5
r. To en rage mutual trust and respect among faculty, dents, and administrators.	1	2	3	4	5	1	2	3	4	5
s. To permit a student wide latitude in selecting the courses he will take toward his degree.	1	2	3	4	5	1	2	3	4	5
t. To provide a wide range of opportunities for specific occupational preparation, e.g., accounting, engineering, pharmacy, etc.	1	2	3	4	5	1	2	3	4	5
u. To provide educational opportunities for adults in the local area.	1	2	3	4	5	1	2	3	4	5
v. To allocate percentages of the total enrollment for minority groups or groups having low socioeconomic status.	1	2	3	4	5	1	2	3	4	5
w. To provide a continuing plan of curricular and instructional evaluation for all programs.	1	2	3	4	5	1	2	3	4	5
x. To make financial assistance available to any student who wants to enroll in college.	1	2	3	4	5	1	2	3	4	5
y. To help students develop a respect for their own abilities and an understanding of their limitations.	1	2	3	4	5	1	2	3	4	5
z. To be responsive to the needs of the local community.	1	2	3	4	5	1	2	3	4	5

3. In what community setting is your campus located? Check one.

1. ____ Urban-inner city
2. ____ Urban-ring (suburbs to metropolitan area)
3. ____ Small self-contained communities (independent of any large metropolitan area)
4. ____ Rural

4. How influential is your local district or governing board as compared with state agencies in setting policies for each of the following functions at your college?

Please read each statement. Then put your answer on the appropriate line for each one of the three columns specified.

Answer Choice
1 = Fully local
2 = Primarily local, some state
3 = About equal
4 = Primarily state, some local
5 = Fully state

	Five years ago	Present	Five years from now
a. Breadth and content of curriculum			
b. Texts and instructional materials			
c. Minimum standards for probation and reten[illegible] of students			
d. District formation and boundaries			
e. Changes in the formal organization			
f. Student fees and/or tuition			
g. Size of operating and capital budgets			
h. Content of operating and capital budgets			
i. Staff qualifications			
j. Appointment and retention of staff			
k. Staff dismissal			
l. Long-range planning			
m. Specification of educational facilities			
n. Admissions policy			

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5. Is your college currently involved in a communication linkup with other institutions for the purpose of sharing information in areas of common interest (e.g., League for Innovation in Community Colleges, G. T. '70, I/D/E/A, etc.)?

1. ____ Yes 2. ____ No 3. If yes, please name the specific program(s) _____

6. Does your institution assist or require faculty to participate in in-service training programs?

1. ____ Yes 2. ____ No

If yes, which of the following training activities are applicable to your institution? (Check all that apply.)

a. ____ Seminars and workshops (on-campus)

b. ____ Seminars and workshops (off-campus)

c. ____ Enrollment for credit at a university

d. ____ Attendance at professional society meetings

e. ____ Relevant work experience

f. ____ Sabbatical leaves

g. ____ Faculty fellowships (e.g., release time to conduct a research project)

h. ____ Tuition reimbursement

i. ____ Professional travel

7. In general, for a new faculty member to be hired for the programs specified below, he must have the following credentials (Circle number corresponding to requirement under each program. If more than one requirement, circle all that apply.):

	Vocational or technical	Adult education	Community services	Academic
No degree required	1	1	1	1
Relevant work experience	2	2	2	2
Two-year degree	3	3	3	3
Four-year degree	4	4	4	4
MA or equivalent	5	5	5	5
PhD or equivalent	6	6	6	6

8. Does your annual budget provide for research, development, or demonstration programs?

1. ____ Yes 2. ____ No

9. A number of college presidents have felt it of sufficient importance to appoint a full-time "change agent" responsible for stimulating others to update their instructional practices, management skills, curriculum offerings, etc. Is anyone on your immediate staff charged with such a full-time responsibility?

1. ____ Yes 2. ____ No If yes, what is his title? _____

10. In determining the amount of money that will be available to your institution for your annual operating budget during the next fiscal year, are you required to submit a detailed budget request?

1. ____ Yes 2. ____ No

If no, is your budget predetermined by an outside agency (e.g., state, county, or district office)?

1. ____ Yes 2. ____ No

If yes, please indicate how important the various considerations are that are listed below? (Circle appropriate number under rating for each consideration.)

	Very important	Fairly important	Somewhat important	Not too important	Not at all important	Not available
a. Last year's budget request	1	2	3	4	5	6
b. Last year's actual allocation	1	2	3	4	5	6
c. Overall district priorities (applicable to multiunit district only)	1	2	3	4	5	6
d. Institutional goals and objectives	1	2	3	4	5	6
e. Anticipated funds available	1	2	3	4	5	6
f. Faculty salaries and fringe benefits	1	2	3	4	5	6
g. Administrative staff and fringe benefits	1	2	3	4	5	6
h. Projected FTE enrollments	1	2	3	4	5	6
i. Present and past enrollments	1	2	3	4	5	6
j. Curriculum offerings	1	2	3	4	5	6
k. Student/faculty ratio	1	2	3	4	5	6
l. Faculty strengths	1	2	3	4	5	6
m. Program effectiveness	1	2	3	4	5	6
n. State master plan	1	2	3	4	5	6
o. Student demands	1	2	3	4	5	6
p. Community demands	1	2	3	4	5	6
q. Ratio of residential to nonresidential students	1	2	3	4	5	6

11. In most colleges, budgets have traditionally been established by line item object of expenditure. Some institutions have begun utilizing a planning, programming, budgeting (PPB) system. Has your college converted to a PPB system? (Please check only one of the following.)

1. ____ Yes 2. ____ In process 3. ____ Anticipate doing so 4. ____ Do not anticipate doing so

12. Over the next 10 years, which of the following sources of funds do you expect to utilize in meeting your annual operating budget? (Circle number under degree for each source.)

	Degree utilized				
	Exclusively	Heavily	Moderately	Lightly	Not at all
a. Federal government revenues	1	2	3	4	5
b. State government revenues	1	2	3	4	5
c. Shared federal and state revenues distributed by the state	1	2	3	4	5
d. Local property tax	1	2	3	4	5
e. Local bonding	1	2	3	4	5
f. Local sales or income tax	1	2	3	4	5
g. Student tuition and fees	1	2	3	4	5
h. Donations and gifts	1	2	3	4	5
i. Church support	1	2	3	4	5
j. Endowments	1	2	3	4	5
k. Interest on investments	1	2	3	4	5
l. Revenues from profit-making ventures (e.g., publications, bookstores, etc.)	1	2	3	4	5
m. Other categories (please specify) _____	1	2	3	4	5

_____

_____

_____

_____

_____

13. Is the faculty at your college represented by a collective bargaining agent?

1. ___ No If yes, which of the following (please check):
2. ____ National Faculty Association (an NEA or local affiliate)
3. ____ State Faculty Association
4. ____ American Federation of Teachers (AFL-CIO or local affiliate)
5. ____ American Association of University Professors
6. ____ Other _____

14. Many students are demanding greater voice in how their colleges are run. At this institution, in your opinion, when it comes to matters of college policy, students—
(Please respond to both categories by circling appropriate number in column and row.)

	Do have—					Should have—					
	Full responsibility	Considerable responsibility	Some responsibility	Little responsibility	No responsibility	Full responsibility	Considerable responsibility	Some responsibility	Little responsibility	No responsibility	
a. Housing rules and regulations	1	2	3	4	5	1	2	3	4	5	
b. Grading practices	1	2	3	4	5	1	2	3	4	5	
c. What courses should be offered	1	2	3	4	5	1	2	3	4	5	
d. What content should be in those courses	1	2	3	4	5	1	2	3	4	5	
e. Hiring new faculty	1	2	3	4	5	1	2	3	4	5	
f. Faculty promotion, tenure	1	2	3	4	5	1	2	3	4	5	
g. Selection of administrative officers	1	2	3	4	5	1	2	3	4	5	78 and C3
h. Allocation of finances	1	2	3	4	5	1	2	3	4	5	
i. Admissions	1	2	3	4	5	1	2	3	4	5	
j. Discipline in academic matters (for example, cheating)	1	2	3	4	5	1	2	3	4	5	
k. Discipline in social matters (for example, drinking)	1	2	3	4	5	1	2	3	4	5	
l. Faculty dismissal	1	2	3	4	5	1	2	3	4	5	
m. Required attendance	1	2	3	4	5	1	2	3	4	5	
n. Graduation requirements	1	2	3	4	5	1	2	3	4	5	
o. Student activity budget	1	2	3	4	5	1	2	3	4	5	71

15. A number of community or junior colleges have tried or put to work one or more of the following "new" practices.

Please indicate the response which best represents the status of this practice at your institution by putting the appropriate number on the line in front of each of the practices listed below.

Answer Choice

1 = Widespread practice
2 = Limited practice
3 = Not in practice at this time, but planned
4 = Tried it but dropped it
5 = Not in practice nor planned

____ a. **Continuous progress program**—a program in which students proceed without regard to grade level or sequence; subjects or courses are not divided into quarters or semesters and students progress on an individual basis.

____ b. **Team teaching**—an arrangement whereby two or more faculty members from the same or different departments, in order to take advantage of their respective competencies, plan, instruct, and evaluate, in one or more subject areas, a group of students.

____ c. **Student tutoring**—involvement of students in tutoring other students on a volunteer or paid basis at the college.

____ d. **Instructional aides**—full or part-time paraprofessional persons or students used to assist faculty in essentially nonteaching duties—primarily mechanical tasks such as paper work.

____ e. **Performance contracting**—contractual relationship with outside organization or faculty group to conduct specified instructional activities leading to prespecified measurable changes in student performance.

____ f. **Ability grouping**—system in which each student is tested in each subject and then is assigned to the class or subgroup within a class which takes account of his knowledge or ability without regard to the grade to which he was last promoted.

____ g. **Extended school year**—total number of days students attend school (exclusive of summer sessions) about 200 days or more, or at least approximately two weeks in excess of what is usually required for credit.

____ h. **Credit by examination**—receiving course credit (for any course) by passing examinations or otherwise demonstrating competence without formally taking the course.

____ i. **Modular calendar**—breaking up courses into variable length time segments, e.g., 3, 6, 12 weeks, etc., rather than traditional semester or year.

____ j. **Elimination of letter grades**—reducing present system of five or more letter grades to only two marks—"pass" or "fail."

____ k. **Flexible scheduling**—operating on a variable schedule which starts with modules of 5 to 20 minutes and organizes the day into various combinations of these modules according to different learning environments needed.

____ l. **Individually prescribed instruction**—programs tailored to fit the instructional needs of each student. Monitoring of student progress may or may not involve a computer.

____ m. **Independent study**—reading and laboratory work done on student's own, to allow him to experience a variety of learning activities away from the constant supervision of teachers.

____ n. **Programmed instruction**—a course designed for independent study in which students regularly use programmed materials so that they can proceed in small steps, respond to information, and are informed immediately whether or not the response is correct.

____ o. **Television instruction**—one or more classes regularly using open or closed-circuit television as means of teaching course.

____ p. **Simulation or gaming**—one or more classes periodically using a device to create realistic political or social situation in class for helping students to become involved in decision-making.

____ q. **Multimedia instruction**—the use of a variety of audiovisual aids by instructors and/or students.

____ r. **Behavioral objectives**—specification of curriculum or learning objectives in operational terms, usually accompanied by some specific standard of performance which the student must achieve.

____ s. **Learning teams**—small groups of faculty and students getting together to jointly plan and carry out an agreed-upon program of study.

____ t. **Advance study for high school students**—an arrangement whereby local high school students can enroll in community or junior college courses.

____ u. **Area vocational training for local high schools**—use of a community or junior college facility as an area center for vocational training.

16. In the light of present day college unrest, is your Board of Trustees taking greater, about the same, or less interest than in the past in the demands posed by the following groups? (Circle appropriate number in column and row.)

	Less interest	About the same	More interest
a. Faculty	1	2	3
b. Students	1	2	3
c. Administration	1	2	3
d. Local community groups	1	2	3
e. State representatives	1	2	3

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In order for the Project Focus staff to keep track of who has or has not completed this questionnaire, we would appreciate your signing and indicating your title. Thank you for your participation. Please be assured that your responses will be held in confidence. A preaddressed, stamped envelope has been provided for returning the document.

(print) Name

(print) Title or Position

(print) Name of Institution

Printed by The American College Testing Program

EXHIBIT VI

project focus
strategies for change

Madison Office Building
Suite 600
1155 15th Street, N.W.
Washington, D.C. 20005
Area Code 202/833-1177
Edmund J. Gleazer, Jr.
Project Director
David S. Bushnell
Research Director
Francis C. Pray
Associate

March, 1971

Dear Coordinator:

The following questions are designed to help us identify certain trends now underway in colleges throughout the country. The information requested is not available in this form from any other information source. Please be as factual as possible. If the requested information is not available or if it is not applicable, please indicate this in writing on the questionnaire. Please remember, your institution is one of a limited number of institutions selected to participate in this survey. Therefore, your full cooperation is very important. All data will be treated with the utmost confidentiality.

If any of the questions are ambiguous, please do not hesitate to call us collect at the following number for clarification -- Area Code 202-833-1177.

Thank you for your assistance.

Sincerely,

David S. Bushnell
Research Director

Ivars Zageris
Research Associate

A National Study by the American Association of Junior Colleges under a Grant from the W. K. Kellogg Foundation.

PROJECT FOCUS
INSTITUTIONAL QUESTIONNAIRE

Name of Institution_____

Name of Person completing the form _____

Title _____

Address _____

Phone Number _____
Area Code Number Extension

Did your president review the completed questionnaire?

1. Yes_____ 2. No_____

6

1. Please indicate the projected enrollment at your campus for the academic year, 1974-75 and 1979-80. Also, please provide your last year's enrollment figures.

	1969-70	1974-75	1979-80
a) Full-time (with no part-time enrollment considered)			
b) Full-time (with part-time enrollment converted into full-time equivalents)*			
c) Part-time			

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What method does your institution use to convert part-time enrollment figures into full-time equivalents?

* The U.S. Office of Education in their HEGIS Survey recommend the Adjusted Headcount Method. The full-time equivalent enrollment equals the headcount of full-time students plus one-third the headcount of part-time students.

2. Approximately what percentage of your freshmen for the academic year 1969-70 entered your institution directly from high school? _____

3. What percentage of your freshmen in the academic year 1969-70 required financial aid?

Estimate % Requiring	Minority Freshmen	All Freshmen
a) No aid	_____	_____
b) Part aid	_____	_____
c) Full aid	_____	_____

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4. At your campus, which of the following programs are available? Please circle the appropriate response. Indicate the number of students (full time equivalents) that were enrolled in the particular programs during the academic year, 1969-70.

Programs	Yes	No	Number Enrolled 1969-70
a) Academic	1	2	_____
b) Occupational (2 year associate degree in applied arts)	1	2	_____
c) Certificate (1 year more or less for specific skill area, e.g., LPN, teacher aide, etc.)	1	2	_____
d) Continuing Education (Adult, special interest courses)	1	2	_____
e) General Education (differentiate from a. and b.)	1	2	_____
f) Developmental, Preparatory, or Remedial	1	2	_____

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5. The following questions pertain to the degree of mobility of students within the two-year curriculum. Please answer all four questions by circling the appropriate number for each.

	0% to 19%	20% to 39%	40% to 59%	60% to 79%	80% to 100%
a) Approximately what percent of the full-time students that started the 1969-70 academic year are now sophomores?	1	2	3	4	5
b) Approximately what percent of the full-time freshmen in the academic curriculum that began in 1969-70 have remained in that curriculum	1	2	3	4	5
c) Approximately what percent of the full-time freshmen in the vocational curriculum that began in 1969-70 have remained in that curriculum?	1	2	3	4	5
d) Of those full-time students who did not remain in the academic curriculum, approximately what percent have transferred into other curricular programs?	1	2	3	4	5

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6. Which of the following are included in programs and/or services for the disadvantaged? Please circle the appropriate answer.

		Yes	No
a)	Recruitment teams	1	2
b)	Community contacts for "leads" to disadvantaged students.	1	2
c)	Lower admissions requirements	1	2
d)	Extra counseling and guidance	1	2
e)	Special tutoring: (If YES, please identify the kinds of persons utilized as tutors)		
	Regular faculty	1	2
	Special faculty	1	2
	Regular students	1	2
	Advanced students in disadvantaged programs	1	2
f)	Programmed instruction	1	2
g)	Reduced course loads	1	2
h)	Liberalized probationary or readmission practices	1	2
i)	Instruction in development of study skills	1	2
j)	Special courses in ethnic studies	1	2
k)	Stress on Communication skills: (If YES, please indicate particular area)		
	Reading	1	2
	Writing	1	2
	Speaking	1	2
	Listening	1	2
	English as a second language	1	2
	Understanding of student's own dialect as a language system	1	2
l)	Financial aid: (If YES, please indicate source and type)	1	2

	Scholarship	Guaranteed loan	Work Study	Co-op	Other
Federal	1	2	3	4	5
State	1	2	3	4	5
Institutional	1	2	3	4	5
Private	1	2	3	4	5

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7. In your judgement, what is likely to happen to the percentage of minority students entering your institution over the next three years? Please check one answer only.

_____1) Substantially increase

_____2) Remain the same

_____3) Increase some

_____4) Decrease some

_____5) Substantially decrease

8. Please indicate what percent of the total annual operating budget was expended on the following items during the last five academic years? (The columns should sum to 100%.)

	1965-66	1966-67	1967-68	1968-69	1969-70
a) Faculty salaries (exclude administrators)	_____	_____	_____	_____	_____
b) Physical plant maintenance and operation	_____	_____	_____	_____	_____
c) Student personnel services	_____	_____	_____	_____	_____
d) Library services	_____	_____	_____	_____	_____
e) Housing & food services	_____	_____	_____	_____	_____
f) Scholarships & loans	_____	_____	_____	_____	_____
g) Other	_____	_____	_____	_____	_____
	100%	100%	100%	100%	100%

66

9. Which of the following are required for admission to your institution? (Please check all that apply)

_____1. High school diploma or equivalent
_____2. Minimum age (_____)
_____3. High school grade average (_____)
_____4. Test scores
_____5. Interview
_____6. Letter of recommendation
_____7. Physical examination
_____8. Other (please specify)

10. What percentage of your students do not meet regular admissions requirements?

_____1) None

_____2) 0.1 - 5.0%

_____3) 5.1 - 10.0%

_____4) More than 10%

75

11. Does your institution systematically coordinate with or contact other institutions or programs in order to avoid unnecessary dupulication of course offerings? Please circle one number for each item listed.

	Not applicable	Frequent contact	Infrequent contact	No contact
a) Other community or Junior colleges	0	1	2	3
b) Area-vocational schools	0	1	2	3
c) High schools	0	1	2	3
d) Public-technical institutions	0	1	2	3
e) Proprietary schools	0	1	2	3
f) Four-year colleges or universities	0	1	2	3
g) Job-corp centers	0	1	2	3
h) MDTA-skill centers	0	1	2	3
i) Work-incentive programs (WIN)	0	1	2	3
j) Neighborhood-youth corps	0	1	2	3
k) Concentrated-employment programs (CEP)	0	1	2	3
l) Industrial-training programs (offered by private industry)	0	1	2	3
m) Others (please specify)	0	1	2	3

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12. During the last three academic years, how many students of the following ethnic groups were enrolled in the programs mentioned below? Please note the full-and-part-time breakdown.

Academic Year	Enrolled In	U.S. Citizens or Permanent Residents												Grand Total
		Selected Minority Groups								All Other U.S. Students		All Foreign Students		
		American Indian		Black or Negro		Oriental		Spanish Surnamed American						
		F-T	P-T	F-T	P-T	F-T	P-T	F-T	P-T	F-T	P-T	F-T	P-T	
1967-68	Occupational Programs													
	Academic Programs													
	All Programs													
1968-69	Occupational Programs													
	Academic Programs													
	All Programs													
1969-70	Occupational Programs													
	Academic Programs													
	All Programs													

EXHIBIT VII

April 26, 1971

Dear Project Focus Coordinator:

I want to express my sincere appreciation for your assistance in gathering the data together which will provide the raw material for our final report. Your effort to insure that a representative sample of students and faculty members were selected for response to the various instruments we sent you will contribute significantly to the overall success of the project.

We have one last request of you. Would you please complete the short information sheet attached and return it in the stamped envelope so that we might accurately portray just how the various samples were drawn. If you have not yet mailed your material to Columbus, Ohio and to Iowa City, Iowa, we would like to urge you to do so as the close off date for the data collection phase of the project has passed. Thank you again for your contribution to Project Focus.

Sincerely yours,

David S. Bushnell

David S. Bushnell
Research Director

DSB:bjw

1. Name of Institution_____

2. Address_____

3. Was the student and faculty questionnaire administered:

	Student		Faculty	
	Yes	No	Yes	No
A. In a required enrollment class				
a) required of all students	___	___	___	___
b) required of freshmen only	___	___	___	___
c) required of sophomores only	___	___	___	___
B. In randomly chosen classes	___	___	___	___
C. In classes neither randomly chosen nor required of all students (please explain if answer is yes)_____ _____	___	___	___	___
D. In a single scheduled group session	___	___	___	___
E. In two or more scheduled group sessions	___	___	___	___
F. By mail	___	___	___	___
G. By some other distribution and collection procedure (please specify) _____	___	___	___	___

4. Please provede your most accurate estimate of the following counts:

	Students			Faculty
	Freshmen	Sophomores	Total	
Full-time enrolled or staff	___	___	___	___
Number in sample chosen	___	___	___	___
Number of respondents	___	___	___	___

5. What is your institution's definition of:

Full-time students_____

Full-time faculty_____

6. Did you only sample:

	Yes	No	What Others
Full-time students	___	___	_____
Full-time faculty	___	___	_____ (Please write in)

7. Did you administer the questionnaires during one semester only?

Yes____ No____ What semester(s) _____

8. In case of nonrespondents, were follow-up attempts made?

Yes____ No____ In what manner?_____

_____

9. Describe briefly any unusual circumstance or special problems encountered in administering the student and/or faculty questionnaire. (Use a separate sheet if necessary).

_____

_____

_____

_____
(Signature)

_____
(Title)